

**T**HE BRITANNIA IRONWORKS were established at the beginning of the present century, at first as an Iron Foundry chiefly, and were soon known for the superior quality of what were called "Derby Castings." This arose partly from the advantages of good iron and moulding sand, and partly from the special skill of the moulders who were settled in the town. This superiority it is believed still exists; and advantage is taken, as far as possible, of all modern improvements and facilities in manufacture. The ornamental Ironwork, which has for many years formed an important part of our business, includes Conservatories, Porticoes, Balconies, Gates, Lamp Pillars, Fountains, Vases, and ornamental castings generally. These are more fully enumerated in the list of Catalogues on the following page. At the Universal Exhibition at London, in 1851, a medal was awarded for our "Iron Castings;" and at the International Exhibition in 1862, we again received a medal for "Iron Castings," and a second one for "Machinery." The Gold Medal for ornamental Fountains and Vases was awarded to us at the Birmingham Meeting of the Royal Horticultural Society, 1872; and the Gold Medal at the Cordova Exhibition of the Argentine Republic in 1871.

The Manufacture of Constructional Ironwork occupies a distinct department; under this head are comprised Bridges of all kinds, for roads and railways; Roofs and Buildings for Markets, Railway Stations, &c., and all structures made of cast or wrought iron. It is impossible to set forth in a Catalogue this class of Ironwork, which forms so large a part of our business, but much and detailed information concerning Bridges, Roofs, &c., with numerous examples of structures actually erected, is given in our book, "Works in Iron," published by E. & F. N. Spon, London.

Derby is one of the principal centres of the English coal and iron manufacturing districts; and the Britannia Ironworks are situated on the river Derwent, by means of which there is direct communication with the leading canals in the country. The Midland and Great Northern Railways both run into our works, and the London and North Western Railway goods station is within easy access, thus affording expeditious means of transit to the ports, and to all parts of the country. The carriage rates of both Railway and Canal Companies are very advantageous, particularly to London, Liverpool, Bristol, and Hull. For effecting delivery in, or shipment from London, our Office there affords every facility.

AND<sup>W</sup>. HANDYSIDE & CO., LTD.

Derby, August, 1879.

# HANDYSIDE'S IRONWORK.

## *LIST OF CATALOGUES.*

1879.

CATALOGUE A.—A Summary of the various classes of Ironwork manufactured by AND<sup>w</sup>. HANDYSIDE AND CO., L<sup>D</sup>. including: Constructional Ironwork, Bridges, Roofs, &c.; General Foundry Work; Ornamental Ironwork; Malleable Castings, &c.

CATALOGUE B.—A large handsomely-bound Book of Designs for all kinds of Ornamental Ironwork. The designs are carefully drawn to scale, and have dimensions printed upon them. They are, for convenience in reference, divided into the following sections:

SECTION I.—Gates, Railings, and Balcony Railings as suited for Palaces, Parks, and Mansions.

SECTION II.—Lamp Pillars, and Lamp Brackets.

SECTION III.—Balusters, Newels, Crestings, and Terminals.

SECTION IV.—Panels, Gratings, and Rosettes.

SECTION V.—Brackets, Cantilevers, Columns, Column Capitals, Masks, and Sundries.

SECTION VI.—Windows, Skylights, &c.

SECTION VII.—Conservatories, Porticoes, Band Stands, Flower Stands for Conservatories, Spiral Staircases, &c., &c.

CATALOGUE C.—An Illustrated Book of Designs for Fountains and Vases, costing from £1 to £1,200.

SECTION I.—Fountains, Ground Basins, Jets, and Fittings.

SECTION II.—Vases and Pedestals.

*In this Catalogue much useful information is given as to cost and mode of fixing Fountains.*

CATALOGUE D.—Smiths' Hearths, Portable Forges, and Smithy Fittings.

CATALOGUE E.—Reaping and Mowing Machines, and other Agricultural Implements.

NOTE.—The Catalogues B and C can, if required, be supplied bound together, with the price lists as one volume.

Box 92. O.

# FOUNTAINS AND VASES.

**O**RNAMENTAL FOUNTAINS AND VASES may be carved in Marble or Stone, moulded in Terra-Cotta and Stucco, or cast in Iron or Bronze. The finest works are those carved in Marble by skilled artists, but the very great cost which is involved renders their use rare. Stone, though not so expensive a material as marble, cannot be sculptured well without considerable cost, but Fountains, and other similar objects, are sometimes made at a comparatively low price by men who are rather masons than sculptors, and who produce inartistic designs in a coarse and rude style. Cheap stone will crack and decay when exposed to wet weather. The art of moulding in Terra-Cotta has been revived and much improved during the last few years, and the most beautiful objects are produced from this material. Fountains are, however, seldom made of Terra-Cotta, and Vases of this material are easily chipped and broken. Fountains and Vases made of this material will crack and crumble away, when exposed to wet or frost.

The art of casting ornamental objects in metal is an old one, and the BRITANNIA IRONWORKS, Derby, is one of the oldest Foundries for this purpose in England. The use of cast-iron or bronze permits a sharpness and delicacy of outline which is impossible in Stone or Stucco, and the fine moulding-sand and iron obtained at Derby allows a smoothness of surface not otherwise easily attainable. Cast-Iron Fountains and Vases, if occasionally painted, are imperishable, and will not crack when exposed to wet or frosty weather.

## FOUNTAINS.

**A**S previously stated, handsome Fountains can be produced in Cast-iron at a much less cost than in Stone, and the finest ornamental work will, when properly painted, endure exposure to the wet without deterioration. AND<sup>w</sup>. HANDYSIDE AND CO. have for many years manufactured Fountains, and have used care in obtaining from skilled artists good designs which can be faithfully rendered in metal. In a garden, park, or public place, a Fountain is a great ornament and luxury, and the large number AND<sup>w</sup>. HANDYSIDE AND CO. send to foreign and warmer climates, shows how much they are appreciated in hot weather. In a fernery or conservatory small Fountains are useful as well as ornamental, for they afford a ready means of supplying the moisture so necessary to the vigorous growth and development of ferns and other plants.

Many people are deterred from purchasing a Fountain by the anticipation of considerable cost and trouble in erecting it and in keeping it supplied with water; but except where the Fountain is very large, little or no difficulty is involved. As, however, Fountains are wanted under various circumstances, information on the following points will prove useful, and may save unnecessary trouble, disappointment, and expense to intending purchasers.

- 1.—The Choice of Fountain.
- 2.—The Head of Water and the Water supply.
- 3.—Ground Basins.
- 4.—The Erection of the Fountain.
- 5.—Prices.

1.—*The Choice of Fountain.* As will be seen from the accompanying illustrations, many sizes and descriptions of Fountains are made, and the choice must be guided very much by the space at disposal and the available quantity of water. Where there is an unlimited supply of water, very fine effects may be produced in a variety of ways, and the water itself forms the most important feature. Where the quantity of water is small, the more massive designs should be avoided, and the Fountain chosen should be light and elegant. It is to be observed, however, that the same kind of jets are made in a variety of sizes, and a large supply of water is not essential.

2.—*The Head of Water and the Water Supply.* The height or force of a jet depends upon the amount of fall between the reservoir and the Fountain, a minimum of 10 to 12 feet being necessary to produce a proper jet. This amount of fall must be reckoned by taking the difference of level between the surface of the water in the reservoir and the top of the brass jet on the Fountain. Where this minimum head of water does not exist, and the force is therefore necessarily small, a pleasant appearance may yet be obtained by having a Fountain, such as No. 11 or No. 20, with a tier of basins, so that the water, although only bubbling forth at the jet, may, by dripping from one basin to the other, produce a good effect. If there is a very plentiful supply of water, the appearance of a cascade may be produced by having supply-pipes of considerable diameter.

It is always an advantage to have the Fountain as near the reservoir as possible, as although water will find its level at any distance, it will, if conveyed far through pipes, lose by friction a portion of the impetus necessary to produce an effective jet. For the same reason bends in the pipe should be avoided where possible, and where they do occur the angles should not be acute. It is in many instances, however, impossible to avoid a long distance, and when this is the case, and a considerable length of piping has to be laid from the reservoir to the Fountain, it is advisable, when the head of water is less than 20 feet, either to have supply pipes of a large diameter the whole distance, or to commence with a large diameter at the reservoir, and gradually reduce towards the Fountain. For instance, if the length is 200 feet, and the pipe through the centre of Fountain to jet is  $\frac{3}{4}$  inch internal diameter, all the supply-pipe may, with advantage, be  $1\frac{1}{4}$  inch diameter, or the 50 feet of pipe nearest the reservoir be  $1\frac{1}{2}$  inch, the next 50 feet  $1\frac{1}{4}$  inch, and the remainder 1 inch; as, by adopting this method, the force of the water is, to a considerable extent, retained at the jet, while if the entire length of pipe is only  $\frac{3}{4}$  inch diameter, the loss through friction is considerable. In towns or districts where waterworks exist, and where pipes have to be laid to join the "main," and to bring the water some

distance to the Fountain, it is desirable to carry out the same plan, considering the "main" as the reservoir. If the Fountain is near the "main" and is supplied directly from it, the above details are not necessary, as the head of water is generally considerable, unless the Fountain be upon very high ground.

A Fountain may be supplied with water from public waterworks, or from a reservoir constructed on a neighbouring hill, or from an iron tank. In those cases where the supply is obtained from public waterworks, the water is generally measured by a meter and paid for, the price in England varying from 10d. to 14d. per 1000 gallons. If the water supply is obtained from a tank, the size varies with the size of the Fountain, and with the period which elapses before the tank can be refilled. If the tank can be supplied with water at any time, it will be found sufficient to have one capable of holding enough for two hours' consumption, but if the supply is liable to interruption, it is better to have a tank large enough to form a reserve. For supplying a small Fountain from an iron tank, and where the latter cannot be filled from public waterworks, a hand-pump will be sufficient for the purpose. Where a large Fountain has to be supplied, there are various methods by which the tank may be filled. Pumps may be worked by horse, pony, or bullock power. Water-wheels, Turbines, Hydraulic Rams, Wind Engines, or Steam Engines, are all available for raising the water, and as a supply is often needed for other purposes besides that of a Fountain, the tank and pumping apparatus may be arranged according to the necessities of each special case. The horse or bullock gear necessary for working pumps is similar to that often used for giving power to agricultural machines, and the same gear may be used for various services.

Water is one of the most economical sources of power, and may be used in different ways. Where a running stream exists, a small wheel will give considerable power, and if tastefully arranged will form an ornament in a park or pleasure-grounds; and in some cases horizontal Water wheels or Turbines may be used to advantage in preference to the ordinary water-wheels. The Hydraulic Ram is an ingenious machine, by which water, with a moderate fall, and when brought in a pipe from a pond or reservoir for the purpose, may be used to force water to a considerable height, without the intervention of a pump, and entirely by its own self-action.

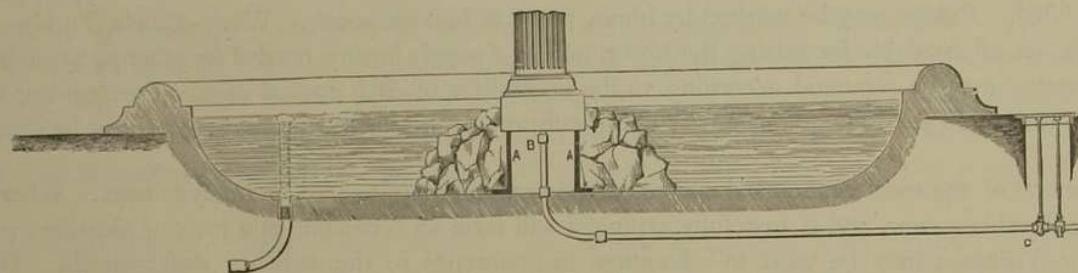
Wind engines are well suited for working pumps. They are very economical in their action, will work night and day without any attention, and they cost nothing to keep them going. The power obtained by them can be used either for pumping or for driving chaff-cutters and other agricultural implements.

Steam power affords the most powerful means of pumping large quantities of water, and there is an endless variety of engines made for this purpose. Small machines, called "Steam Pumps," are very useful where the raising of water is the only service required, and these pumps occupy very little room and do not require a large boiler.

3.—*Ground Basins.* These are made from 8 to 18 inches deep, and should always be larger in diameter than the largest basin in the Fountain. Where space is limited, the ground basin can be kept as small as the above condition will allow, but where possible, the diameter should be 3 or 4 feet larger than that of the upper basins. A still greater diameter has a good appearance in a garden, or other open place, and allows the use of jets which scatter the water. Ground basins can be made of iron, stone, brick, or cement. The dimensions and prices of the iron basins are given in price list, and the corresponding illustrations will be found in the body of the Catalogue. Those up to

6½ feet in diameter are complete in one piece, but beyond that size they are made in segments jointed in the same way as a tank. Each basin has a hole in the centre for the supply pipe to enter, and is fitted with a combined overflow and waste valve, ready for connection with an overflow pipe. For large Fountains, and where puddled clay or cement can be obtained for the bottom of the basin, it is unnecessary to incur the expense of making the whole surface of iron; the rim only is so made, and the centre is left open. As, however, it is sometimes more convenient to have the entire basin of iron, alternative prices are given for them in either way. Those basins which are cast in one piece are always made complete, and require no clay or cement.

It is sometimes cheaper to have the entire basin made of stone, brick, or cement, instead of iron, and any builder or bricklayer should know how to make one well and water-tight. The engraving shows the kind of basin that is required, and, if intended for a



large Fountain, the basin should, at the centre, be firm enough to sustain the weight. The supply and overflow-pipes should be laid at the time the basin is made. The waste-pipe should be of larger diameter than the supply-pipe. The water surface should be one or two inches below the rim of the basin.

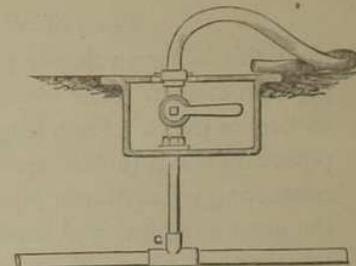
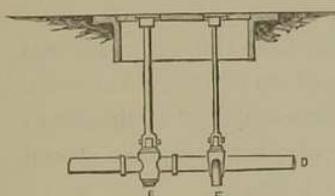
In a conservatory or fernery, where a small Fountain is to be fixed, a ground basin may be constructed of zinc; but iron is the strongest and most enduring. Holes for the supply and waste water should be provided as described above, and the basin can either be let into the ground, or can stand upon the floor—in the latter case, with rockwork and ferns placed all round.

*4.—The Erection.* The process of erection is very simple, and can be performed by an ordinary workman. If required, however, a workman can be sent to any part of Great Britain, at a moderate cost, to set the Fountain to work. Although, for convenience of carriage, the Fountains are sent in pieces, duplicate marks or numbers are painted on the parts that join, and everything having been previously fitted, the putting together is a simple matter. With the large Fountains a drawing is sent to facilitate the process. In order to have the whole height of the Fountain in view, it is generally arranged that the lower edge of the base shall be only about two inches below the water level, and it is therefore necessary to provide in the centre of the ground basin, a support on which the base of the fountain can rest. Some stones or bricks can be placed for this purpose; but if more convenient, the smaller Fountains (those up to 7 ft. in height) can rest on

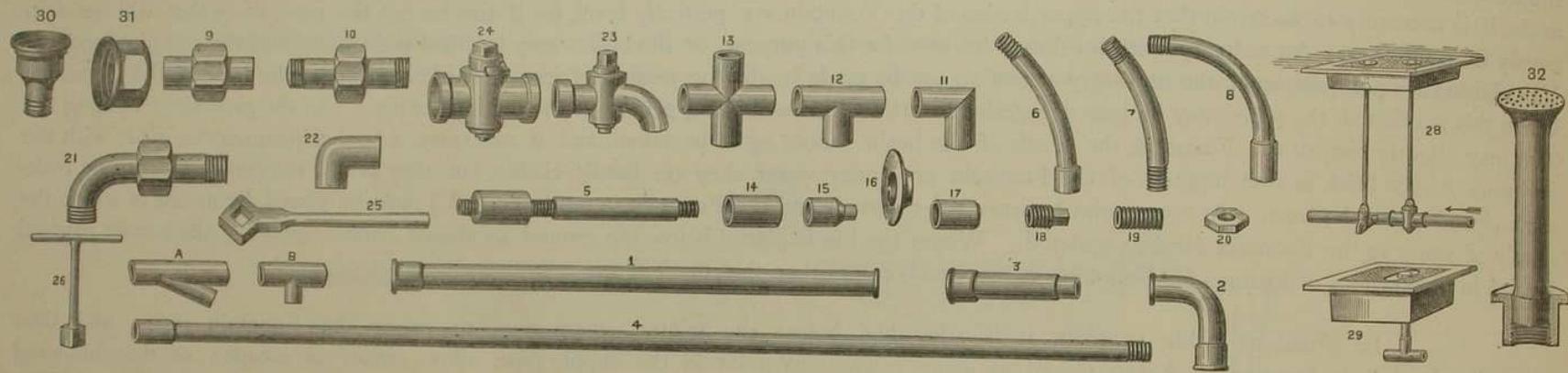
iron standards (AA), and when this is the case the Fountain base is sent prepared for joining to these standards, which are charged extra. For large and heavy Fountains, a solid and well-built base should be provided. The ground basin having been made as previously described, and the end of the supply-pipe left standing up to point B, the Fountain can be fixed in its place. The pipe forming part of the Fountain, and supplied with it, projects slightly below the base, and, by means of an ordinary junction-socket, is joined to the supply-pipe at B. To allow this connection to be made, it is necessary that the brick base or iron standards on which the Fountain rests shall be sufficiently open to allow the workman's hands to enter. When the Fountain has been placed in the ground basin, and before the connection of the supply-pipe is made, it is necessary to ascertain that the upper basins of the Fountain are perfectly level, for if this be not the case, the water will not drip evenly from the rims. An ordinary spirit level may be used for this purpose, or the basins may be filled with water and the dripping noticed. If the basins are not quite level, the necessary alteration can be made by driving wedges of iron or hard wood under the base of the Fountain. When this is effected, the pipes may be joined together, a little white lead being placed on the uniting screws. As the process of making the joint may slightly disturb the Fountain, the levels of the basin should again be taken, and, if necessary, a final adjustment be made with the wedges. As the brick or iron supports of the Fountain are under water, they are hardly visible, but they can be effectually hidden by rock-work placed round the base. At some point between the reservoir and the Fountain, a tap or cock (C) must be placed, by means of which the supply of water to the Fountain can be regulated. Where the tap is placed below the ground, as shown in the engraving, the handle marked No. 26 in illustrations of Fittings for Fountains is more convenient than that marked 25.

In situations liable to frost, it is advisable, before the winter commences, to empty the Fountain pipes, and thus avoid all risk of their bursting. A tap, placed at some convenient point in the supply-pipe, allows water to escape; or the following arrangement of taps, will facilitate the operation both of supplying and emptying the Fountain. The water being conveyed to the Fountain by pipe D, a tap, E, regulates the supply. When it is desired to empty the Fountain pipes, the tap E is closed, tap F is opened, and the water is thus allowed to run to waste. The lever rods for working the taps are enclosed in a cast-iron box, which is let into the ground at any point between the Fountain and the reservoir. In the engravings of Fittings for Fountains, the box is illustrated (No. 28), and the price is given on the list.

When the pipes to a Fountain are being laid, advantage may be taken of them to provide water for a garden, or for extinguishing fires. A "T junction," G (No. 12 in engraving of Fittings for Fountains), being inserted in the supply-pipe, a tap and union joint, as shown in the engraving, allow ordinary hose or India-rubber tubing to be connected. The tap and union are enclosed in a neat cast-iron box, which can be sunk in the ground with the lid level with the surface. In ordering one of these boxes (No. 29 in engraving of Fittings for Fountains), the diameter of the Fountain supply-pipe to which it is to be fixed should be stated, so that a T piece of the proper size can be sent.



## PIPES AND FITTINGS.



THE only fittings usually necessary for the erection of a Fountain are, as previously described, the supply-pipes from the reservoir and a waste-pipe from the Fountain basin to the drain, and these can often be supplied by the workman employed to erect the Fountain. The following price list is given for the convenience of those purchasers who reside in foreign countries or in districts where it is difficult to procure ordinary fittings, and the numerous bends and other small fittings shown in the list will be useful to those who have to make special adaptations of existing water-pipes, or who wish to combine with the Fountain arrangements a water supply for other purposes.

Pipes of all sizes, up to  $2\frac{1}{2}$  inches diameter, are usually made of wrought-iron, and are sometimes galvanized (coated with zinc), this being a valuable preventive of corrosion from rust. All the articles in price list which are marked \* can be galvanized as per prices given in the list. The wrought-iron tubes or pipes are made in lengths of from 10 to 14 feet, and are connected together by means of screwed sockets or joints. Each length of pipe is provided with the necessary socket without extra charge. For  $2\frac{1}{2}$  inches diameter and upwards, the pipes and bends (unless specially ordered to be of wrought-iron) will be supplied of cast-iron. Junctions A, B, and 3 show the method of connecting wrought-iron pipes to cast-iron pipes. If when a Fountain is ordered a proper sketch is supplied showing what piping is requisite, the necessary pipes and bends will be selected, cut to the proper lengths, and marked so as to indicate the order in which they are to be put together. No extra charge will be made for doing this, beyond the prices stated for pipes, &c. The diameter of supply-pipe given in column 11 of Fountain price list, will indicate the size of pipe necessary for conveying the water from the reservoir.

(156. 5. 80.)

HANDYSIDE'S IRONWORK.  
Price List Catalogue C.  
FOUNTAINS, VASES, &c.  
1880.



## SPECIAL NOTICE.

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All Goods Oil Painted, unless ordered to be Galvanised.  
Lots of not less than 2 cwt. in weight or £2 in value,  
Carriage Free, to London, Liverpool, Bristol, Hull, or  
any Railway Station within 100 miles of Derby.

## CATALOGUE C. SECTION I.—FOUNTAINS.

## HANDYSIDE'S FOUNTAINS.

The prices quoted in the following list in each case include the Piping in the Fountain itself and one simple Jet. The prices quoted for Fountains 1, 16, and 49, include for each an Ornamental Cast Iron Moulding (as shown in the Illustrated Catalogue), to suit stone or cement ground basins. Ground basins, decorative painting, and packing, charged extra.

Nos.	Page	Diameter of Jets applicable	Diameter of Supply Pipe.	PRICE.	Painted Bronze or Marble.	Painted White and Gold, or Bronzed and Gilded.	Nos.	Page	Diameter of Jets applicable	Diameter of Supply Pipe	PRICE.	Painted Bronze or Marble.	Painted White and Gold, or Bronzed and Gilded
1	12	1,100 0 0	£ s. d.	£ s. d.	£ s. d.	£ s. d.	25	29	... 1/2 & 1/2	1/2 to 2 1/2	£ s. d.	£ s. d.	£ s. d.
2	34	13 0 0	14 0 0	15 0 0	26	22	27	22	1/2 & 1/2	1/2 to 2 1/2	9 0 OE	9 12 6	10 2 6
3	33	13 0 0	14 0 0	15 0 0	27	22	28	22	1/2 & 1/2	1/2 to 2 1/2	12 10 0	13 2 6	14 5 0
4	...	...	...	...	28	22	29	22	1/2 & 1/2	1/2 to 2 1/2	12 10 0	13 2 6	14 5 0
5	33	15 12 6	16 17 6	17 10 0	29	30	30	22	1/2 & 1/2	1/2 to 2 1/2	8 15 OE	9 7 6	9 17 6
6	34	2 15 OA	3 0 0	3 5 0	30	22	31	30	1/2 & 1/2	1/2 to 2 1/2	8 10 0	9 2 6	9 12 6
6	34	4 15 OB	5 7 6	5 17 6	31	30	32	29	1/2 & 1/2	1/2 to 2 1/2	6 15 OE	7 5 0	7 15 0
7	31	4 0 OA	4 5 0	4 12 6	32	29	33	29	1/2 & 1/2	1/2 to 2 1/2	5 17 6	6 7 6	6 17 6
7	31	6 0 OB	6 13 0	7 2 6	33	29	34	27	1/2 & 1/2	1/2 to 2 1/2	30 0 0	32 0 0	34 10 0
8	...	...	...	...	34	27	35	27	1/2 & 1/2	1/2 to 2 1/2	5 10 0	6 0 0	6 7 6
9	31	3 0 OA	3 5 0	3 12 6	35	27	36	14	1/2	2 1/2	7 5 0	7 15 0	8 5 0
9	31	5 0 OB	5 12 6	6 0 0	36	14	37	20	1/2	2 1/2	44 0 OE	46 0 0	48 0 0
10	...	...	...	...	37	20	38	15	1/2 to 2 1/2	2 1/2 to 2 1/2	230 0 0	...	...
11	21	30 0 0	32 0 0	34 0 0	38	15	39	27	1/2 to 2 1/2	1/2 to 2 1/2	38 0 0	39 10 0	41 0 0
12	17	55 0 0	57 0 0	60 0 0	40	18	41	19	1/2 & 1/2	1/2 & 1/2	140 0 0	...	...
13	32	23 15 0	25 0 0	27 0 0	40	18	41	19	1/2 & 1/2	1/2 & 1/2	5 0 OF	...	...
14	31	20 0 0	21 5 0	22 10 0	41	19	42	40	1/2	1/2	58 0 0	60 0 0	62 0 0
15	30	18 0 0	19 5 0	21 0 0	41	19	42	40	1/2	1/2	58 0 0	60 0 0	62 0 0
16	13	950 0 0	...	...	42	40	43	40	...	...	5 0 0	5 7 6	5 15 0
17	34	7 15 0	8 10 0	9 5 0	43	40	44	40	...	...	4 0 0	4 7 6	4 15 0
18	42	16 0 0	17 5 0	18 5 0	44	40	45	28	1/2	1/2	10 0 0	10 15 0	11 5 0
19	16	72 10 0	...	...	45	28	46	28	1/2	1/2	2 5 OG	2 8 6	2 15 0
20	32	6 10 0	7 5 0	8 0 0	45	28	46	28	1/2	1/2	4 6 OH	4 15 0	5 0 0
21	32	5 5 0	5 15 0	6 5 0	46	28	47	28	1/2	1/2	32 10 OI	34 0 0	35 0 0
22	42	6 15 OC	7 5 0	7 17 6	47	28	47	28	1/2	1/2	3 5 OG	3 10 0	3 15 0
23	42	7 5 OD	7 17 6	8 10 0	48	41	49	26	1/2	1/2	5 6 OH	5 15 0	6 0 0
24	42	7 17 6	8 10 0	9 0 0	49	26	50	26	1/2	1/2	34 0 0	...	...
		18 0 0	19 5 0	20 5 0					...	...	780 0 0	...	...

A Without pedestal.  
B Including pedestal.  
C Without dog trough.

D Including dog trough.  
E Jet specially arranged.  
F Jets included.

G Without ground basin.  
H Including ground basin.  
I Special Jets.

## SECTION II.—VASES.

## HANDYSIDE'S VASES.

The Prices of Vases do not include pedestals except in those marked \* where the Vases are supplied as illustrated.  
Price List of Pedestals on Page 26. Decorative Painting and Packing charged extra.

Nos.	Description.	Page	Height.	Diameter.	PRICK.	Painted Bronze or Marble,	Painted White and Gold, or Bronzed and Gilded,	Appropriate Pedestals.
					£ s. d.	£ s. d.	£ s. d.	
1	Large size with scroll ..	69	2' 6"	1' 10"	2 2 6	2 7 6	2 12 6	Nos. 3 and 5
1	Large size without scroll ..	69	2' 6"	1' 10"	2 0 0	2 4 0	2 10 0	Nos. 3 and 5
1	Small size with scroll ..	69	2' 0½"	1' 6"	1 10 0	1 13 6	1 17 6	Nos. 4, 5B, and 3B
1	Small size without scroll ..	69	2' 0½"	1' 6"	1 7 6	1 10 0	1 15 0	Nos. 4, 5B, and 3B
2	... .. ..	69	2' 6"	1' 10"	2 15 0	3 0 0	3 5 0	Nos. 1, 2, 5A, and 9
3	" Medici," large ..	66	2' 6"	1' 11"	4 0 0	4 7 6	4 15 0	Nos. 5A and 3A
3A	" Medici," large ..	66	2' 6"	1' 11"	4 0 0	4 7 6	4 15 0	Nos. 5A and 3A
3	" Medici," small ..	60	1' 5"	1' 3"	2 2 0	2 5 6	2 10 0	Nos. 5C and 8
3A	" Medici," small ..	60	1' 5"	1' 3"	2 2 0	2 5 6	2 10 0	Nos. 5C and 8
4	... .. ..	60	2' 0"	0' 9"	1 1 0	1 3 0	1 4 6	
5	... .. ..	60	2' 8½"	1' 5"	4 0 0	4 6 0	4 13 6	Nos. 2 and 6
5A	... .. ..	60	2' 8½"	1' 5"	4 0 0	4 6 0	4 13 6	Nos. 2 and 6
6	Without Handles ..	62	2' 6"	1' 11"	1 17 0	2 0 0	2 2 0	Nos. 3 and 5
6	With Handles ..	62	2' 6"	1' 11"	2 1 0	2 5 0	2 7 0	Nos. 3 and 5
6A	Without Handles ..	62	3' 6"	2' 8"	6 0 0	6 15 0	7 5 0	No. 4A
6A	With Handles ..	62	3' 6"	2' 8"	6 7 6	7 2 6	7 12 6	No. 4A
6B	Without Handles ..	69	1' 7½"	1' 4½"	0 14 0	0 15 6	0 17 0	Nos. 5C and 8
6B	With Handles ..	69	1' 7½"	1' 4½"	0 17 6	0 19 0	1 0 6	Nos. 5C and 8
7*	... .. ..	70	5' 4"	6' 0"	25 0 0	26 0 0	27 0 0	
8	" Warwick " ..	66	1' 5"	1' 11"	9 0 0	9 7 6	9 17 6	No. 7
9	Tazza ..	68	1' 7½"	2' 6"	1 19 0	2 2 6	2 6 6	Nos. 3, 5, and 5A
9A	Tazza ..	68	0' 10"	1' 3½"	0 10 0	0 11 0	0 12 6	Nos. 5C and 8
9B	Tazza ..	68	1' 2½"	1' 10½"	1 0 0	1 2 0	1 4 0	Nos. 3B, 4, and 5B
9C	Tazza ..	68	1' 9"	3' 3"	2 17 6	3 2 6	3 12 0	Nos. 3A and 5A
10	Dolphins and Boys ..	62	2' 6"	1' 11"	2 12 6	2 17 6	3 2 6	Nos. 1, 2, 5A, and 9
11*	Lotus ..	70	3' 4"	5' 0"	1 10 0	1 12 0	1 13 0	
15*	.. .. ..	70	3' 6"	4' 0"	9 10 0	10 5 0	10 15 0	
16*	Britannia Vase ..	66	6' 0"	4' 0"	26 0 0	27 0 0	28 5 0	
17	... .. ..	62	1' 9½"	2' 3"	2 7 6	2 10 0	2 15 0	Nos. 3 and 5
17A	... .. ..	69	2' 8½"	3' 0"	4 10 0	4 17 6	5 5 0	No. 4A
17B	... .. ..	70	1' 3"	1' 6"	1 12 6	1 15 0	1 17 6	Nos. 4, 5B, 5C, and 8
18	... .. ..	62	1' 10"	2' 9"	3 0 0	3 5 0	3 12 6	Nos. 3 and 5
19	... .. ..	62	1' 4½"	1' 0"	0 12 0	0 13 0	0 15 6	Nos. 5C and 8
20	... .. ..	66	1' 3"	1' 0"	0 14 0	0 15 0	0 17 6	
21	Dog and Swans ..	66	1' 5"	1' 3½"	2 0 0	2 2 6	2 5 0	Nos. 5C and 8
22	... .. ..	60	1' 7"	... .. ..	0 17 6	0 19 0	1 0 6	
23	" Night and Morning " ..	60	4' 8½"	... .. ..	22 10 0	23 10 0	24 10 0	No. 4A
24	... .. ..	69	1' 6½"	2' 4"	1 10 0	1 13 6	1 17 6	Nos. 3, 5, and 5A
24A	... .. ..	68	1' 3"	1' 8½"	0 17 0	0 18 6	1 0 0	Nos. 3B, 4, and 5B
24B	... .. ..	68	0' 11"	0' 10½"	0 11 0	0 12 0	0 13 6	Nos. 5C and 8
25*	Tazza ..	68	3' 6"	1' 10½"	3 15 0	4 0 0	4 10 0	
26	Vine ..	66	2' 0½"	1' 5"	2 12 0	2 17 6	3 0 0	Nos. 3B, 4, and 5B

## HANDYSIDE'S VASES—Continued.

No.	Description,	Page.	Height,	Diameter	PRICE.	Painted Bronze or Marble.	Painted White and Gold, or Bronzed and Gilded.	Appropriate Pedestals
27 <sup>9</sup>	Dolphin and Shell	70	3' 6"	4' c"	16 0 0	17 0 0	18 0 0	
28 <sup>9</sup>	Dolphin and Tazza	67	3' 9"	3' 4"	12 10 0	13 5 0	14 0 0	
29 <sup>9</sup>	Boys and Tazza ...	67	3' 9"	3' 3"	12 10 0	13 5 0	14 0 0	
30 <sup>9</sup>	... ...	67	4' 0"	2' 6"	10 10 0	11 5 0	12 0 0	
31 <sup>9</sup>	... ...	67	3' 8"	2' 9"	10 0 0	10 15 0	11 10 0	
32 <sup>9</sup>	... ...	61	5' 0"	4' 0"	44 0 0	47 0 0	49 0 0	
33 <sup>9</sup>	... ...	61	3' 0"	2' 4"	4 5 0	4 15 0	5 2 6	
34	... ...	61	2' 2 $\frac{1}{2}$ "	1' 11"	6 0 0	6 10 0	7 0 0	
35	... ...	61	2' 2 $\frac{1}{2}$ "	1' 11"	6 0 0	6 10 0	7 0 0	
36 <sup>9</sup>	... ...	61	2' 4 $\frac{1}{2}$ "	2' 4"	4 15 0	5 0 0	5 5 0	
37	... ...	63	1' 10"	2' 8"	10 10 0	11 5 0	12 5 0	No. 10.
38	... ...	63	3' 0"	2' 0"	8 8 0	8 15 0	9 2 6	No. 10.
39	... ...	63	2' 4"	2' 7"	15 0 0	15 15 0	16 10 0	No. 10.

## HANDYSIDE'S PEDESTALS.

In ordering Pedestals the number of the Vase for which they are to be used must be stated.

No.	Page.	Height.	PRICE.	Painted Bronze or Marble.	Painted White and Gold, or Bronzed and Gilded.	REMARKS.
1	69	2' 2"	£ s. d.	£ s. d.	£ s. d.	
2	69	2' 6"	1 12 0	1 16 0	1 18 0	
3	62	1' 3"	2 5 0	2 9 0	2 12 0	
3A	62	1' 3"	0 14 0	0 16 0	0 18 0	
3B	66	1' 4"	0 17 0	0 19 0	1 0 6	
4	66	1' 6"	0 14 0	0 15 6	0 17 0	
4A	60	2' 2"	1 0 0	1 1 6	1 3 0	
5	62	2' 0"	3 12 6	3 17 6	4 2 6	
5A	62	2' 0"	1 6 0	1 8 6	1 11 0	
5B	66	2' 0"	1 10 0	1 12 6	1 14 0	
5C	68	1' 6"	1 4 0	1 5 6	1 7 0	
6	60	2' 4 $\frac{1}{2}$ "	0 13 0	0 14 6	0 16 6	
7	66	2' 4 $\frac{1}{2}$ "	2 15 0	2 18 0	3 1 0	
8	60	3' 5"	3 15 0	3 18 0	4 2 6	
8	62	0' 6"	0 7 6	0 8 6	0 9 6	
9	62	0' 8"	0 7 6	0 8 6	0 9 6	
10	63	2' 6"	0 17 0	0 19 0	1 0 6	
			3 3 0	3 7 6	3 12 0	This is same as 3A

# HANDYSIDE'S FOUNTAIN PIPES AND FITTINGS.

No.	Page	DESCRIPTION.	INTERNAL DIAMETER.											
			1-in.	1&frac12;-in.	2&frac12;-in.	1-in.	1&frac14;-in.	1&frac12;-in.	1&frac34;-in.	2-in.	2&frac12;-in.	3&frac12;-in.	3-in.	
1	10	Cast-iron Pipes, from 6 to 9 ft. lengths	..	..	..	..	..	..	..	..	..	..	1/1	1/4 foot
1	10	Cast-iron Pipes, from 1 ft. up to 6 ft.	..	..	..	..	..	..	..	..	..	..	1/6	1/10 foot
1	10	Cast-iron Pipes, if with branches A or B, screwed for connection to wrought-iron Pipes extra	..	..	..	..	..	..	..	..	..	..	4/6	4/6 each
2	10	Cast-iron Bend Pipes	..	..	..	..	..	..	..	..	..	..	4/6	5/9 each
3	10	Cast-iron Pipes with spigot-end screwed for connection to wrought iron Piping extra	..	..	..	..	..	..	..	..	..	..	4/-	4/- each
4*	10	Wrought-iron Pipes, from 2 to 14 ft. lengths	1/3	1/4	1/6	1/8	1/11	1/2	1/6	1/9	2/6	3/3	3/3	.. foot
5*	10	Wrought-iron Connecting Tubes, 3 to 24 in.	1/9	1/11	1/2	1/6	2/-	2/6	3/3	4/-	5/6	7/-	..	each
6-7-8*	10	Wrought-iron Bends, to any angle.	1/7	1/8	1/11	1/3	1/9	2/3	3/3	4/3	6/6	10/-	..	each
9 & 10*	10	Wrought-iron Sockets and Unions.	2/6	3/-	4/-	5/6	6/9	8/-	9/-	10/-	12/-	14/-	..	each
11*	10	Wrought-iron Elbows	1/7	1/8	1/10	1/2	1/9	2/3	3/-	3/6	5/6	8/6	..	each
12*	10	Wrought-iron Tees	1/7	1/9	1/-	1/3	1/9	2/6	3/-	3/9	6/-	9/6	..	each
13*	10	Wrought-iron Crosses	1/-	1/5	1/9	2/3	3/-	3/6	4/6	5/3	10/6	16/-	..	each
14*	10	Wrought-iron Sockets	1/2	1/3	1/3	1/4	1/6	1/7	1/9	1/-	1/6	2/6	..	each
15*	10	Wrought-iron diminishing Sockets..	1/4	1/5	1/6	1/7	1/9	1/11	1/1	1/3	2/-	3/-	..	each
16*	10	Wrought-iron Flanges	1/10	1/-	1/2	1/4	1/6	1/9	2/-	2/6	3/9	5/-	..	each
17 & 18*	10	Wrought-iron Caps and Plugs	1/3	1/4	1/5	1/6	1/8	1/10	1/-	1/3	2/-	2/6	..	each
19 & 20*	10	Wrought-iron Nipples and Backnuts	1/2	1/3	1/3	1/4	1/6	1/8	1/10	1/-	1/9	2/3	..	each
21*	10	Wrought-iron Union Bends	3/-	3/9	5/-	6/3	8/6	10/-	11/6	13/6	16/-	19/-	..	each
22*	10	Wrought-iron Elbows, round backed	1/8	1/9	1/-	1/4	1/11	2/6	3/4	3/10	6/6	10/-	..	each
23	10	Let-off Taps, brass	4/3	5/6	7/6	12/-	..	..	..	..	..	..	..	each
24	10	Stop Cocks, brass	4/6	5/6	9/6	14/6	22/-	30/-	40/-	55/-	75/-	100/-	140/-	each
24	10	Stop Cocks, iron with brass plugs	..	..	..	13/-	19/-	28/-	36/-	42/-	60/-	85/-	120/-	each
25*	10	Tap Handle, wrought-iron	1/-	1/4	1/8	2/-	2/4	3/-	3/6	4/-	4/9	6/-	9/-	each
26*	10	Tap Handle, according to length—average	..	..	..	..	..	..	..	..	..	..	..	each
28	10	Main and Let-off Cocks, Box, Handle, Covers, &c., complete	3/-	3/-	4/-	5/-	6/6	8/6	10/6	13/-	19/-	..	..	each
29	10	Hydrant Box, with reducing Tees for Main, Hydrant Cock, &c.	..	50/-	55/-	67/6	82/6	95/-	120/-	138/-	160/-	185/-	240/-	set
30	10	Brass reducing Sockets for Jets..	..	..	30/-	40/-	60/-	80/-	..	..	..	..	..	each
31	10	Brass Blank Caps	..	2/-	3/-	..	4/-	..	..	..	..	..	..	each
32	10	Combined Brass Overflow and Discharge Valve	..	..	2/-	..	..	..	..	..	..	..	..	each

\* If galvanized 25 per cent. extra.

# HANDYSIDE'S GROUND BASINS.

Ornamental Cast-iron Mouldings or Rims for Stone or Concrete Ground Basins. See description on Page 8 of Illustrated Catalogue.

No.	Page.	External Diameter.	Depth.	PRICE.	No.	Page.	External Diameter.	Depth.	PRICE.
				£ s. d.					£ s. d.
1	50	12' 9"	1' 6"	47 10 0	2	50	11' 6"	1' 6"	32 12 0
1	50	16' 9"	1' 6"	62 0 0	2	50	16' 6"	1' 6"	42 0 0
1	50	20' 9"	1' 6"	82 0 0	2	50	21' 0"	1' 6"	54 0 0

Ground Basins, entirely of iron, complete with iron bottom, overflow and discharge valves.

See description in Illustrated Catalogue, Page 7.

1	50	12' 9"	1' 6"	76 0 0	3	50	4' 6"	0' 8"	4 10 0
1	50	16' 9"	1' 6"	115 0 0	3	50	5' 6"	0' 8"	8 8 0
1	50	20' 9"	1' 6"	155 0 0	3	50	6' 6"	0' 8"	11 0 0
2	50	11' 6"	1' 6"	57 0 0	3	50	8' 9"	1' 0"	24 0 0
2	50	16' 6"	1' 6"	93 0 0	3	50	10' 9"	1' 0"	40 0 0
2	50	21' 0"	1' 6"	123 0 0	3	50	12' 9"	1' 0"	50 0 0

# HANDYSIDE'S FOUNTAIN JETS.

The Jets are made of polished brass. They can be screwed on or off easily by hand. One Jet is supplied with each Fountain, but it is recommended that extra ones be ordered. Except for Fountains having the Jets specially arranged, the Jets are chased to the ordinary gas-thread pitch. In ordering Jets, the number of the Fountain and the internal diameter of the supply pipe must be stated. Packing charged extra.

No.	Page.	INTERNAL DIAMETER.				No.	Page.	INTERNAL DIAMETER.			
		1-in.	1½-in.	2-in.	2½-in.			1-in.	1½-in.	2-in.	2½-in.
1	55	4/6	5/6	7/7	18/-	7	56	4/-	5/6	7/-	18/-
2	55	4/3	5/-	7/-	18/-	8	56	5/-	6/-	7/6	20/-
3	55	3/3	4/-	5/-	12/-	9	56	5/-	6/-	...	...
4	55	3/3	4/-	5/-	12/-	10	56	7/-	9/-	12/-	20/-
5	55	7/6	9/-	12/-	20/-	11	56	9/6	11/-	13/-	25/6
6	55	3/-	4/-	5/-	12/-	12	56	9/6	12/-	15/-	...

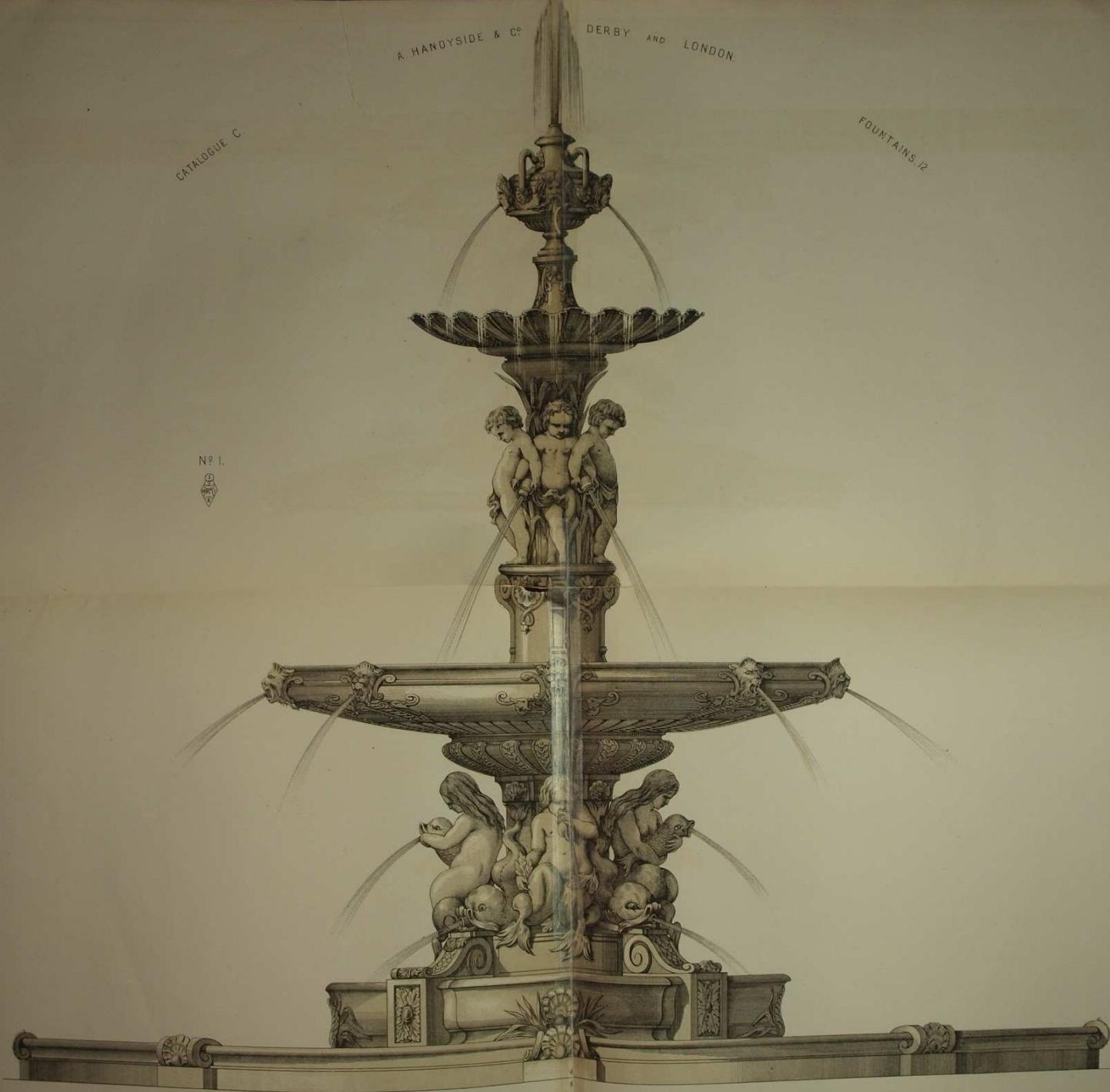
Plain Nozzle Jets (as used in a fire engine), for forcing one Jet of water to a great height, same price as No. 4. Jets mentioned in Fountain Price List as "specially arranged" are same price as 1-in. Jets.

A. HANDYSIDE & CO.  
DERBY AND LONDON

CATALOGUE C.

FOUNTAINS 12

N<sup>o</sup>. I.



SCALE

12 10 8 6 4 2 3 5 6 7 FEET.

ARMSTRONG & CO., MANUFACTURERS OF IRON

A. HANDYSIDE & CO. DERBY AND LONDON

CATALOGUE C

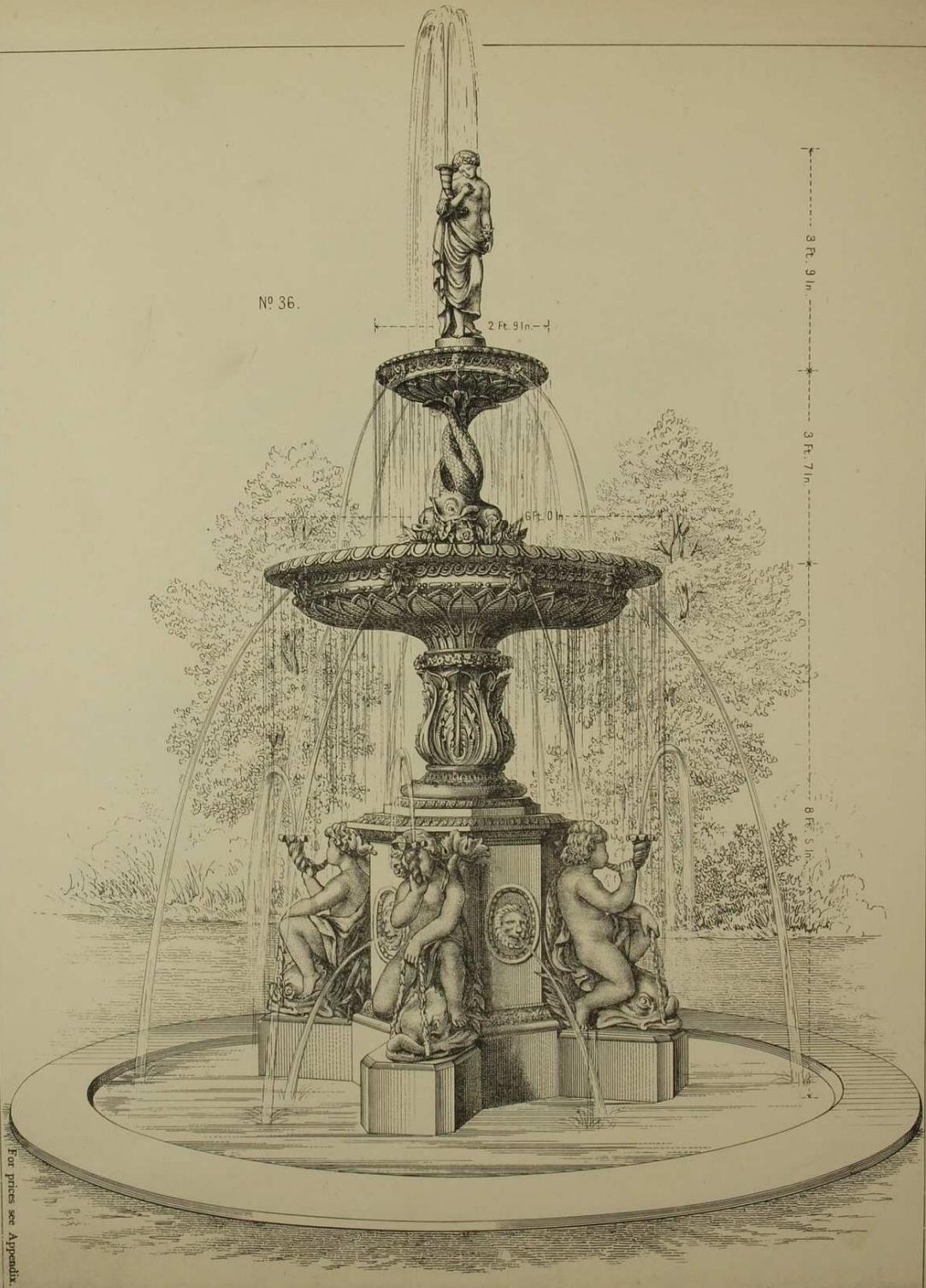
FOUNTAINS 13

N<sup>o</sup> 16.



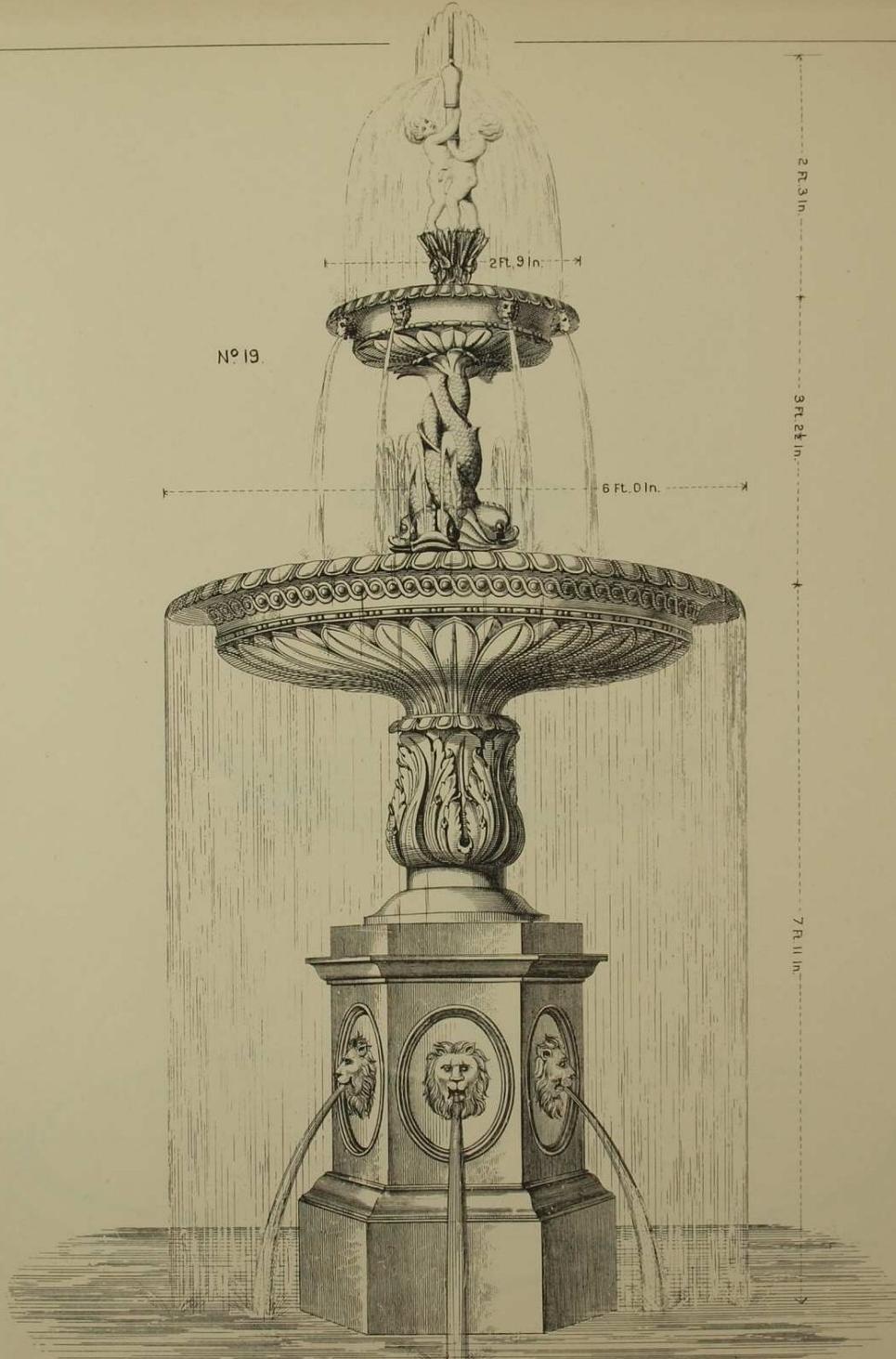
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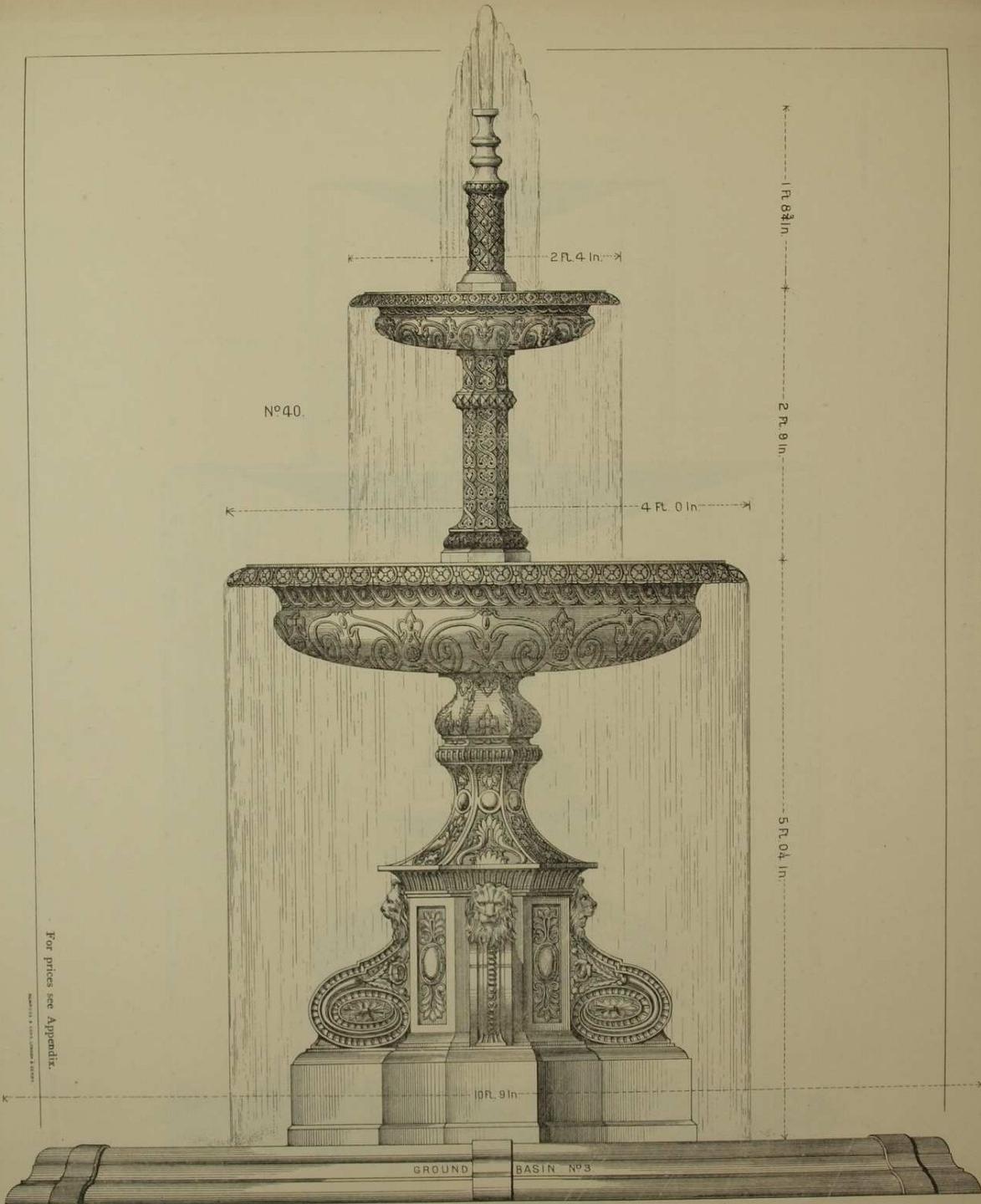


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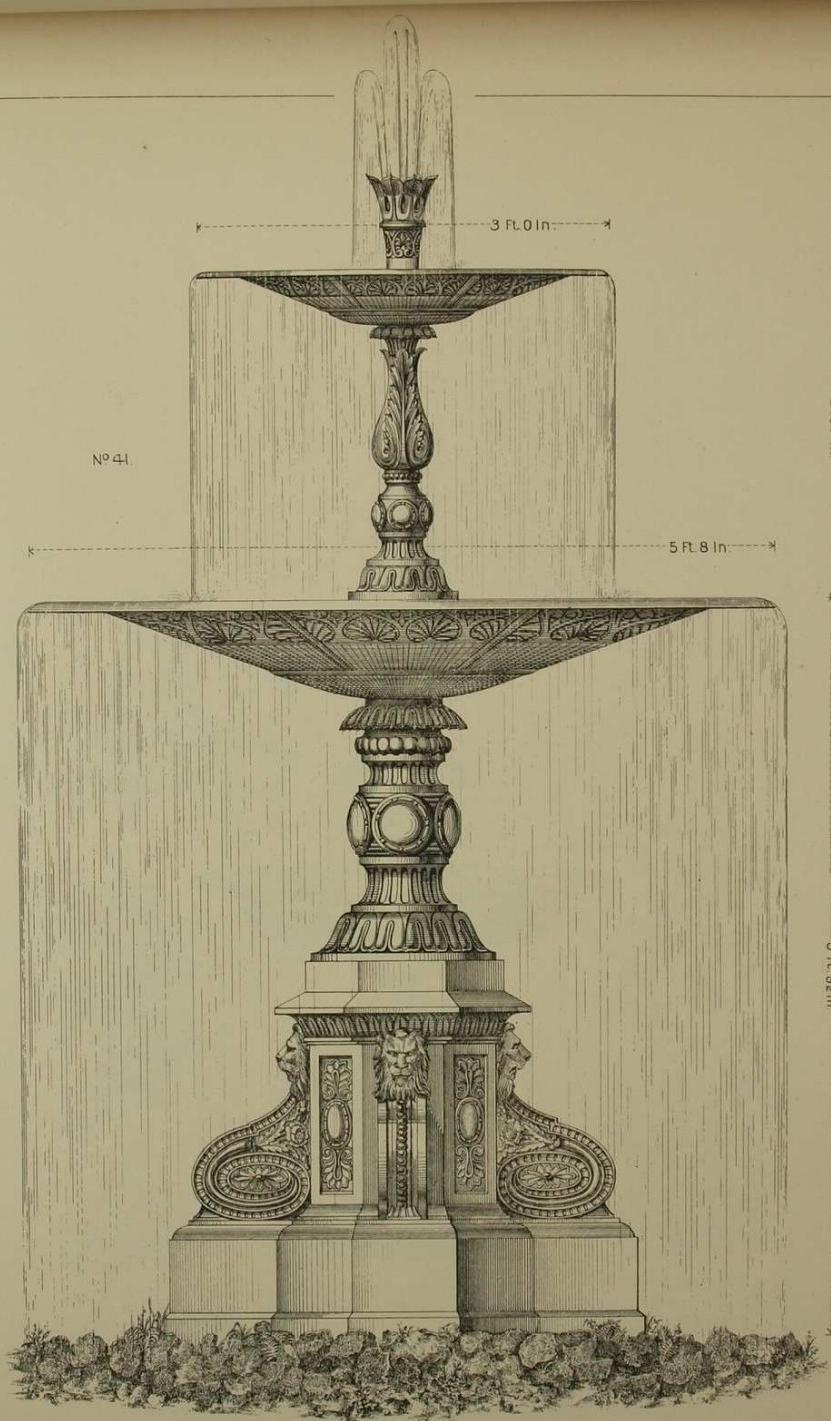


GROUND BASIN N<sup>o</sup> 3.

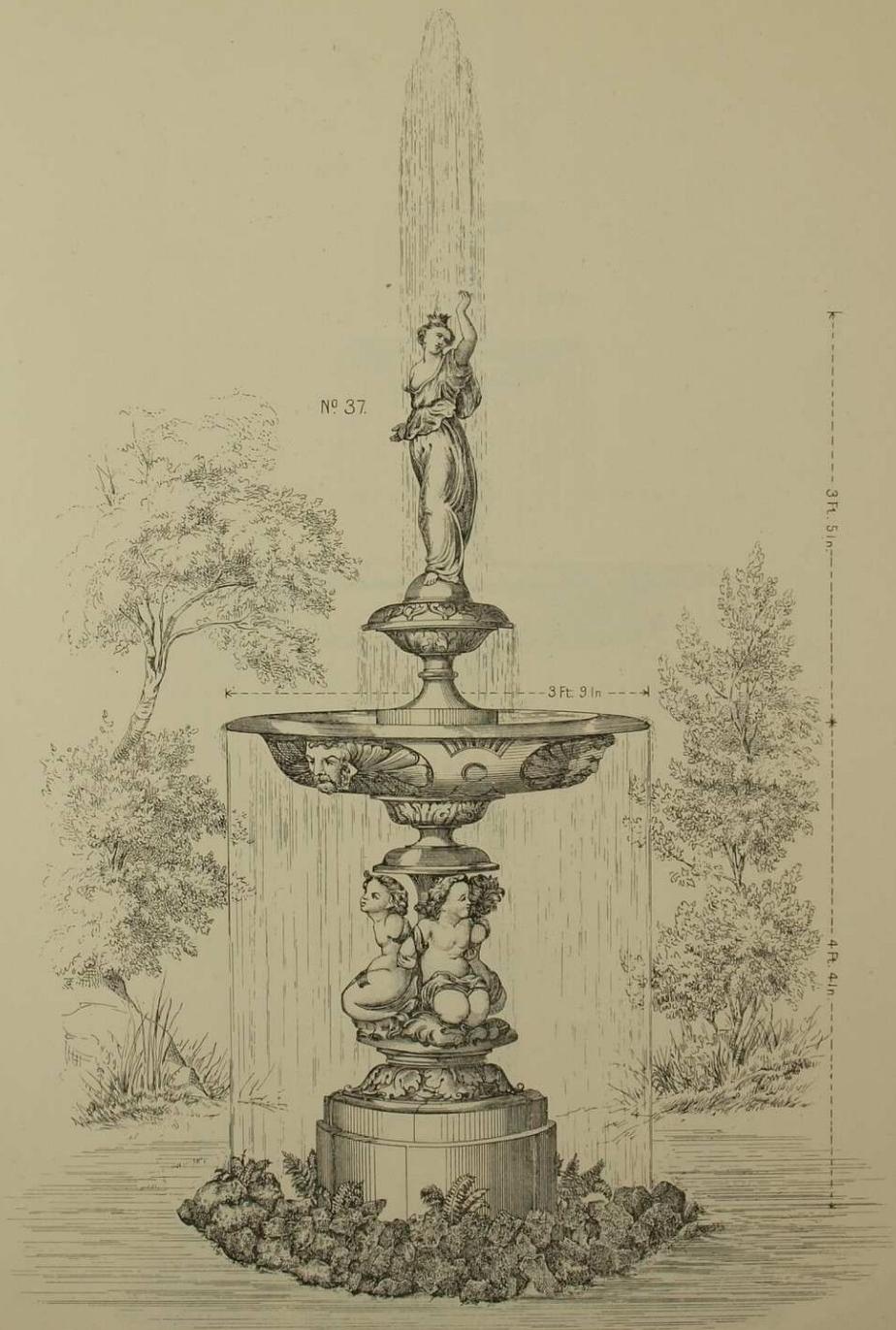


For prices see Appendix.

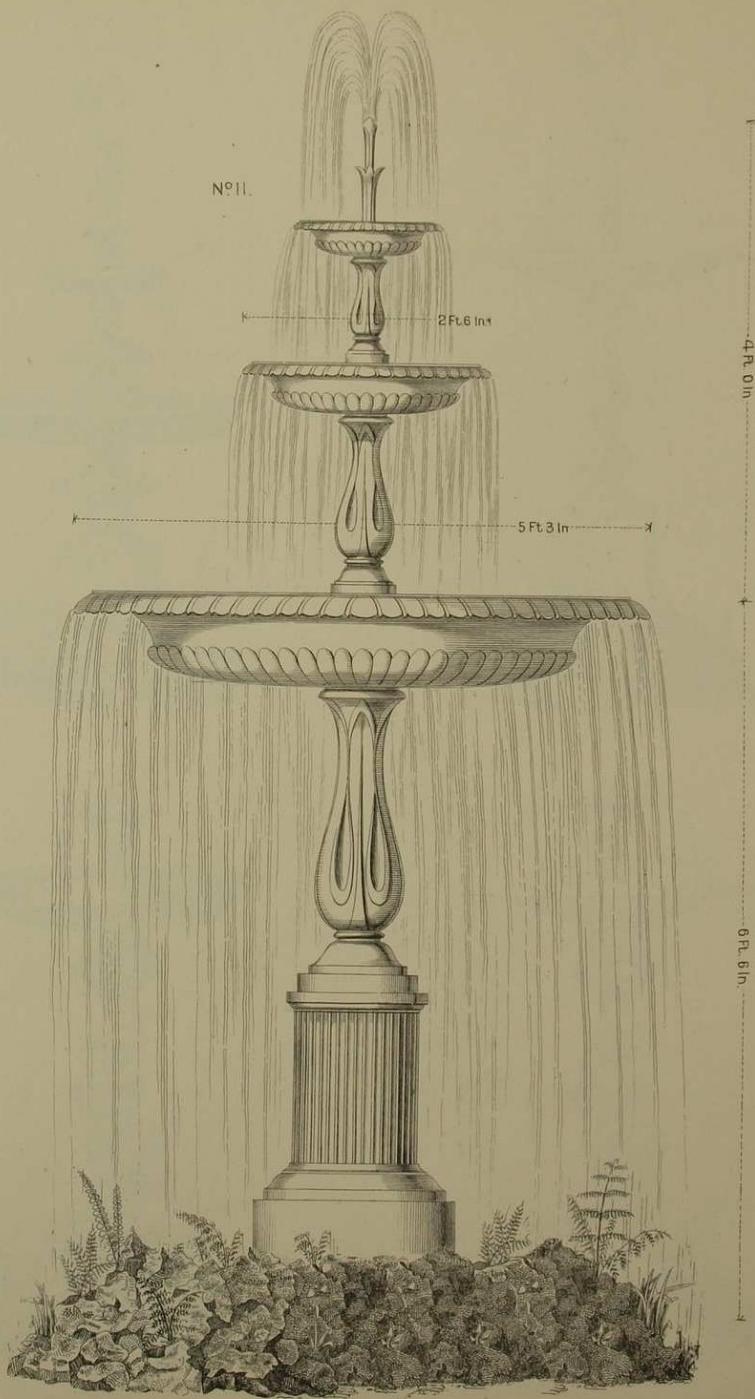
Patent No. 13,131. Oct. 10, 1873. Handyside & Co. Ltd.



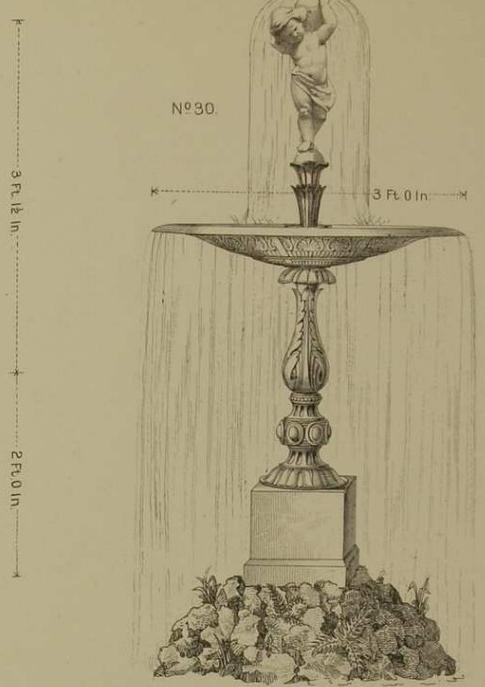
For prices see Appendix.



For prices see Appendix.



N<sup>o</sup>. 28. 2 Ft. 6 In. 3 Ft. 0 In. 3 Ft. 4 In.

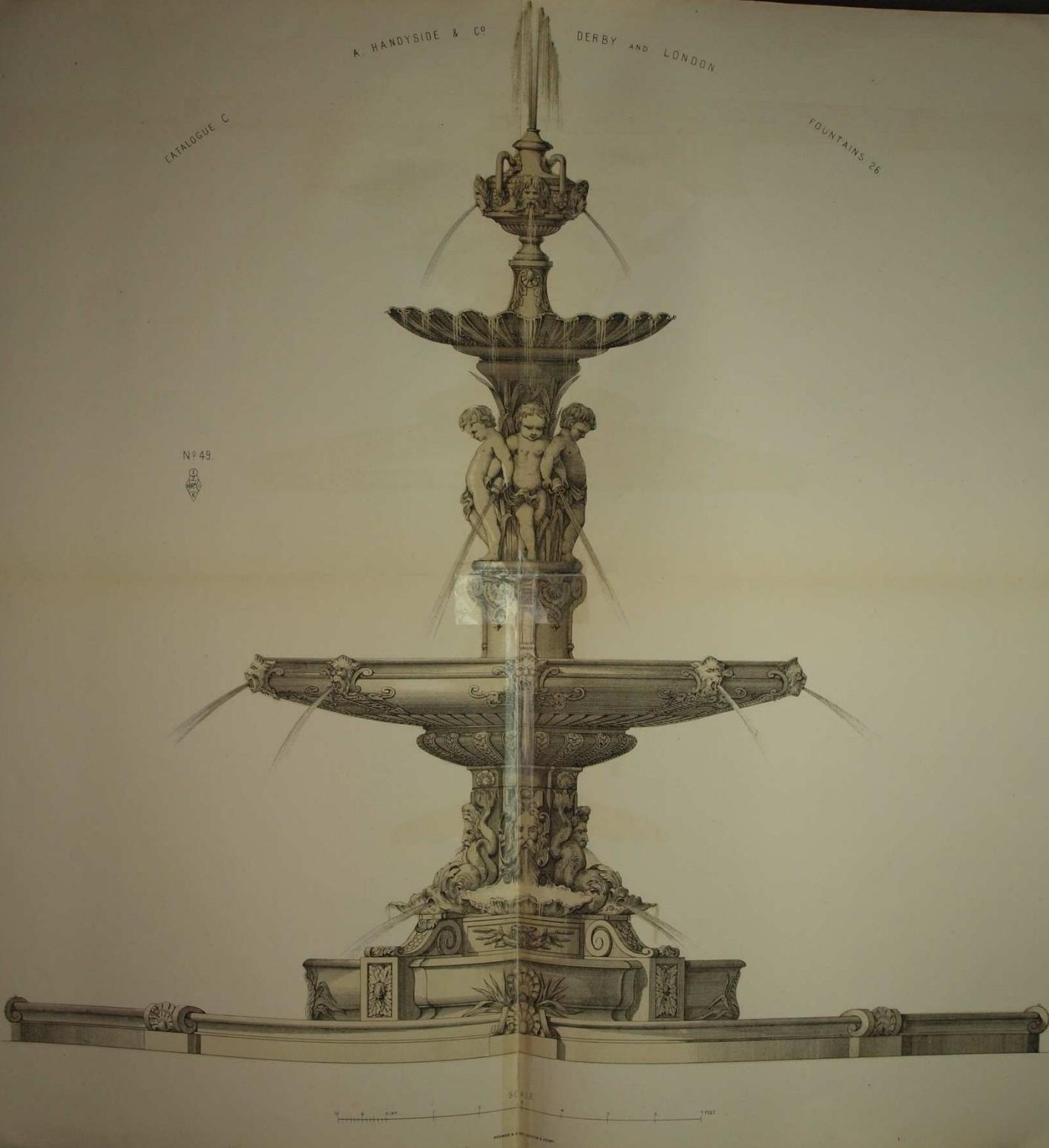
N<sup>o</sup>. 26N<sup>o</sup>. 27

A. HANDYSIDE & CO.  
DERBY AND LONDON

CATALOGUE C

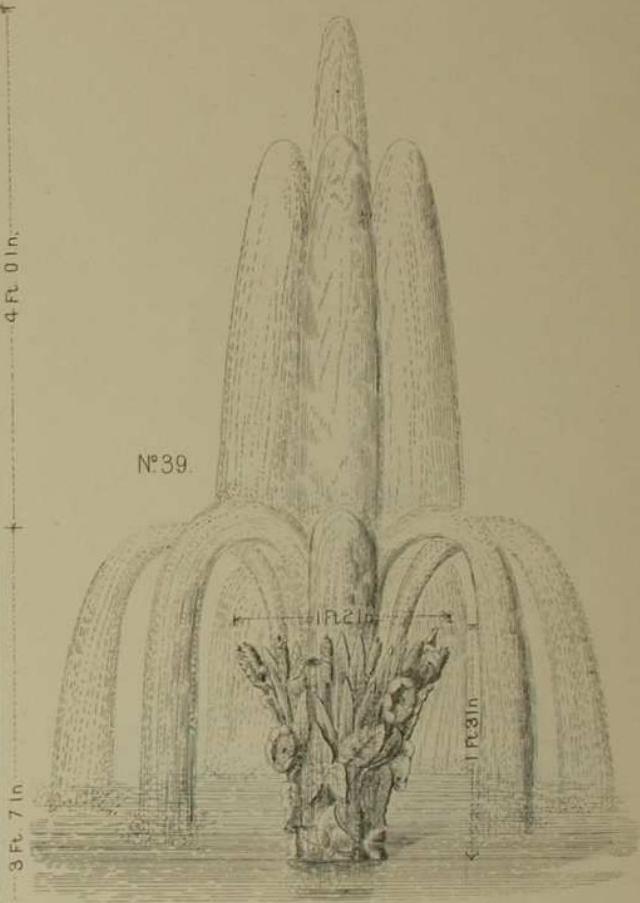
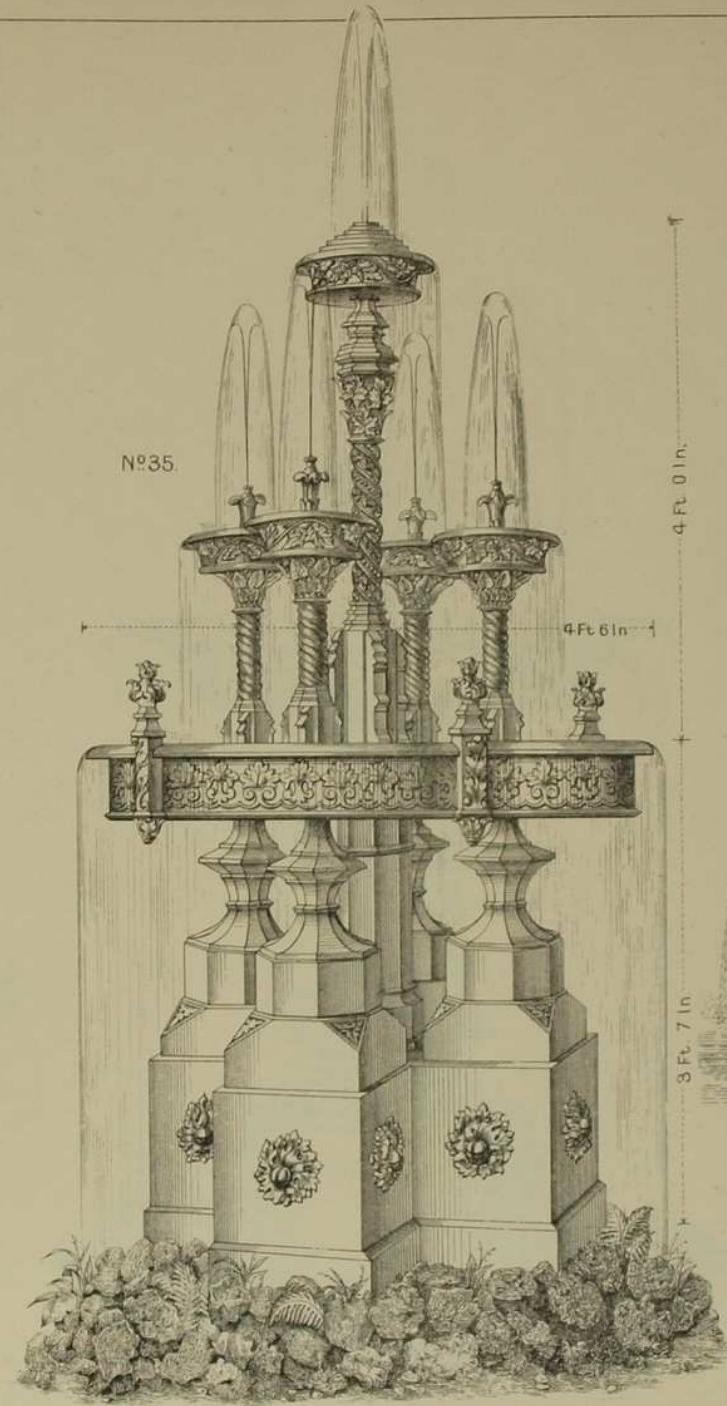
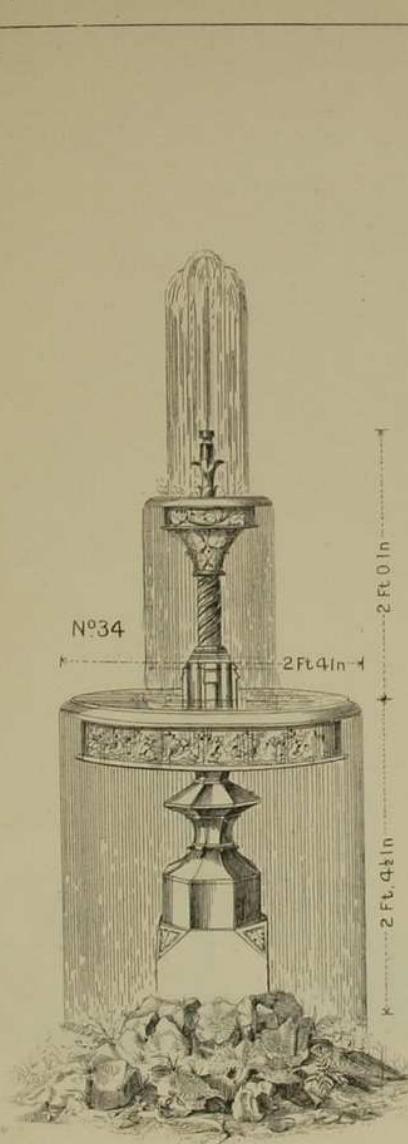
FOUNTAINS 26

N<sup>o</sup> 49.

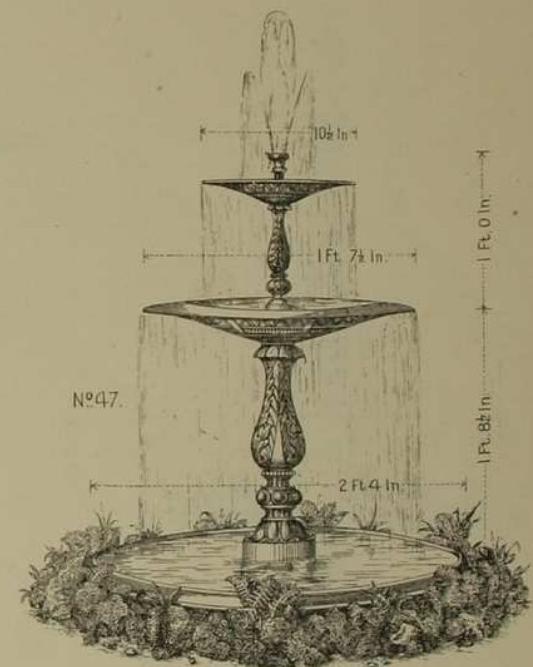
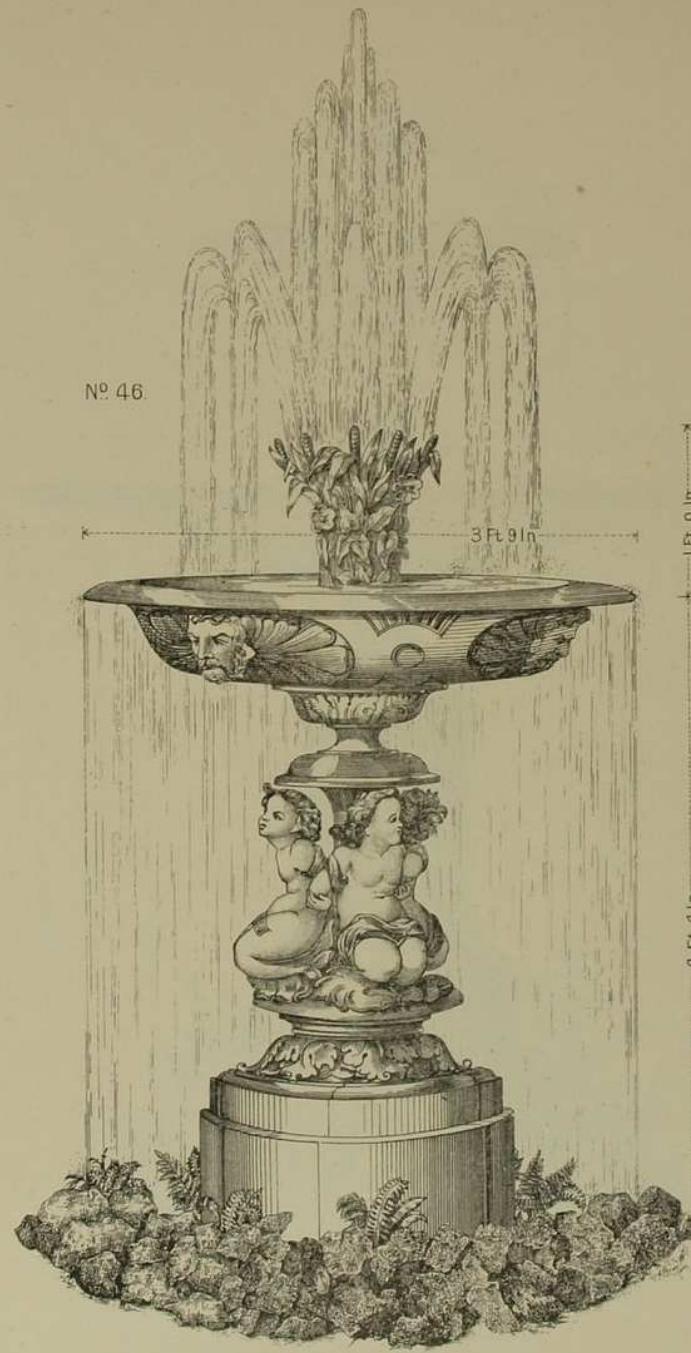
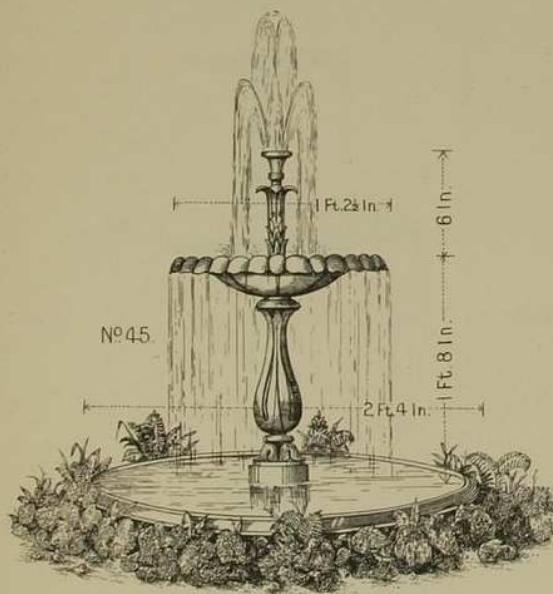


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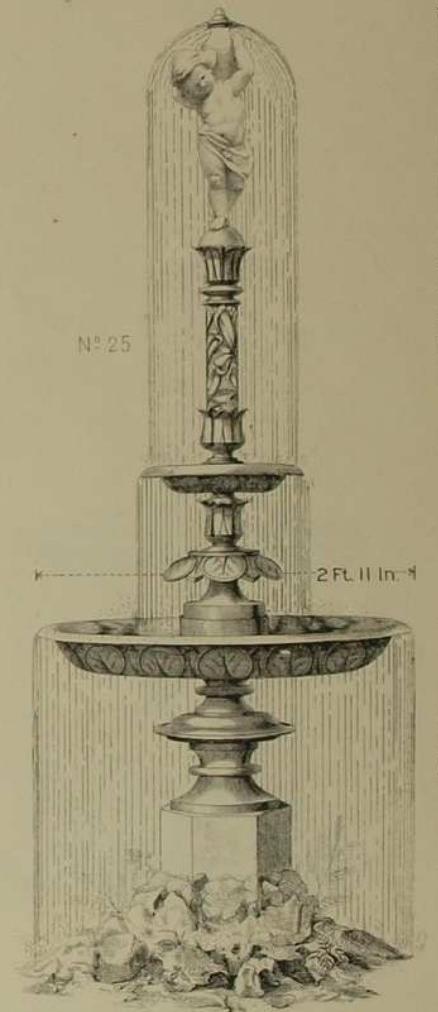
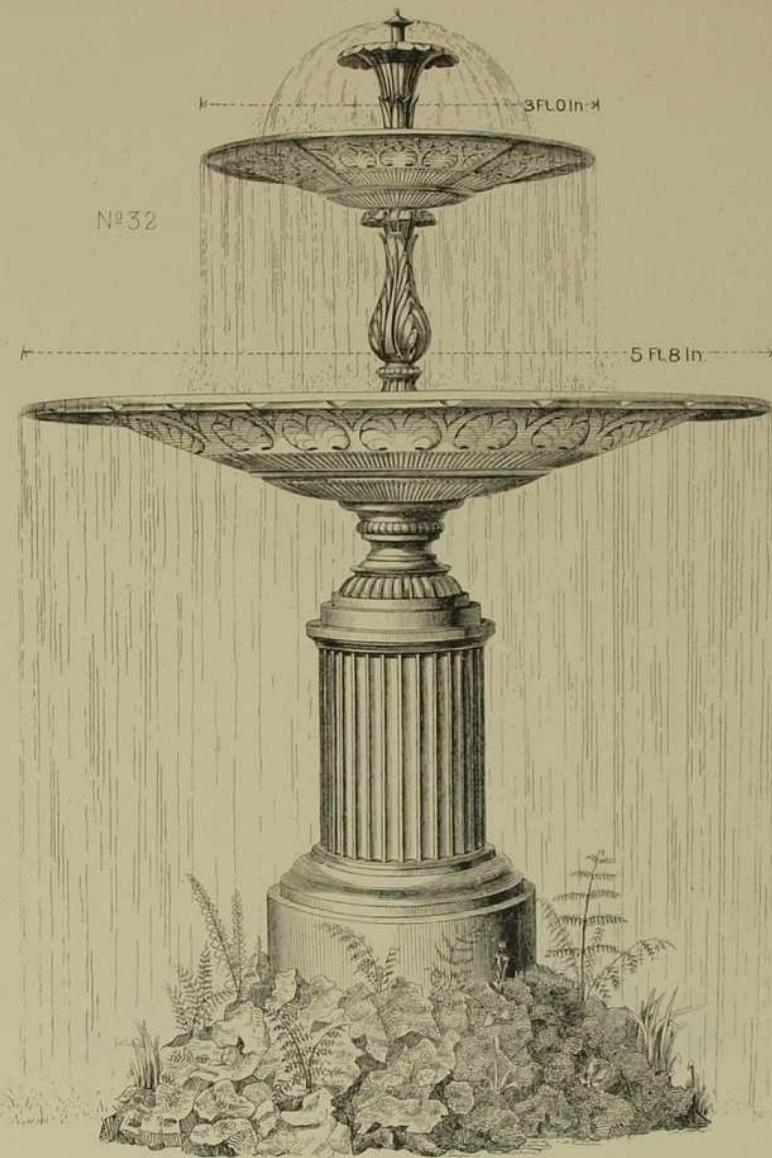


For prices see Appendix.

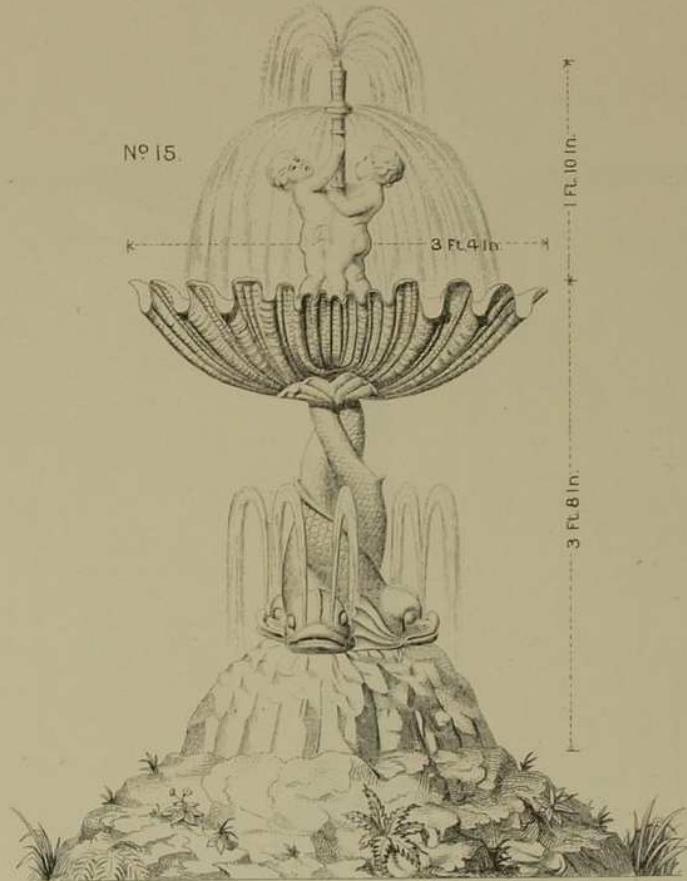
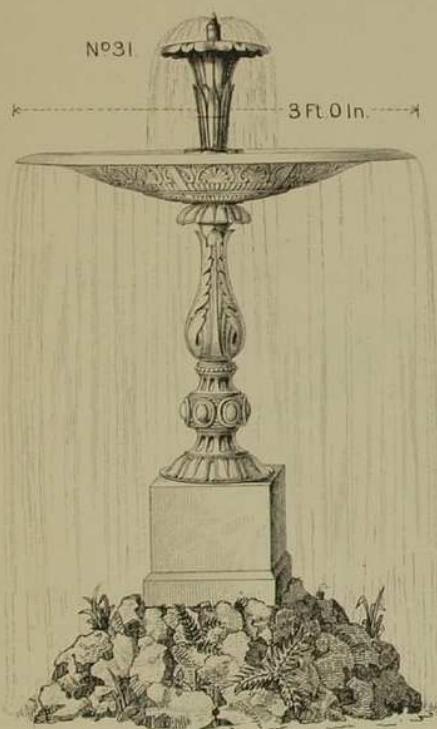


Nos. 45 or 47 can be supplied with Ground Basin as illustrated.

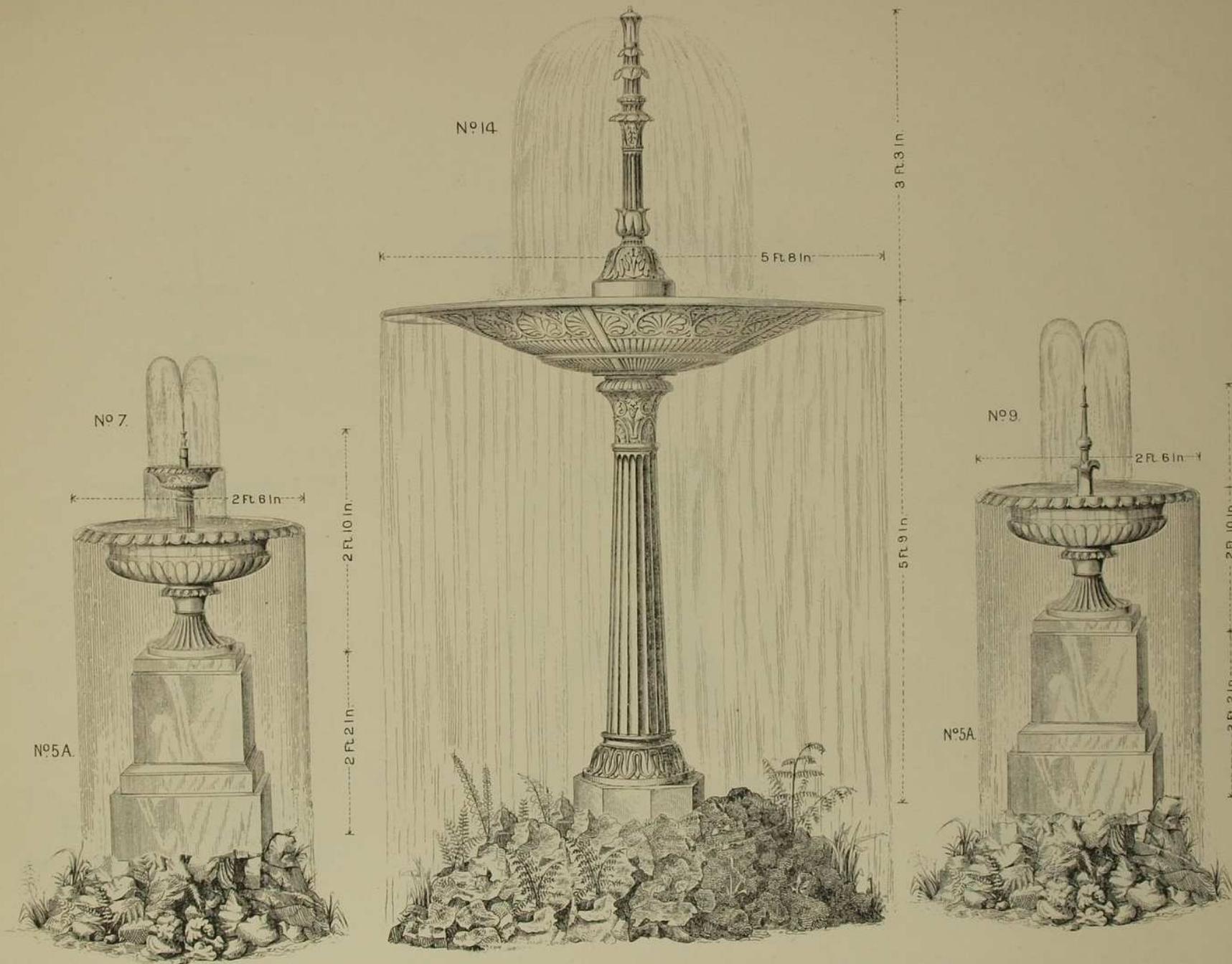
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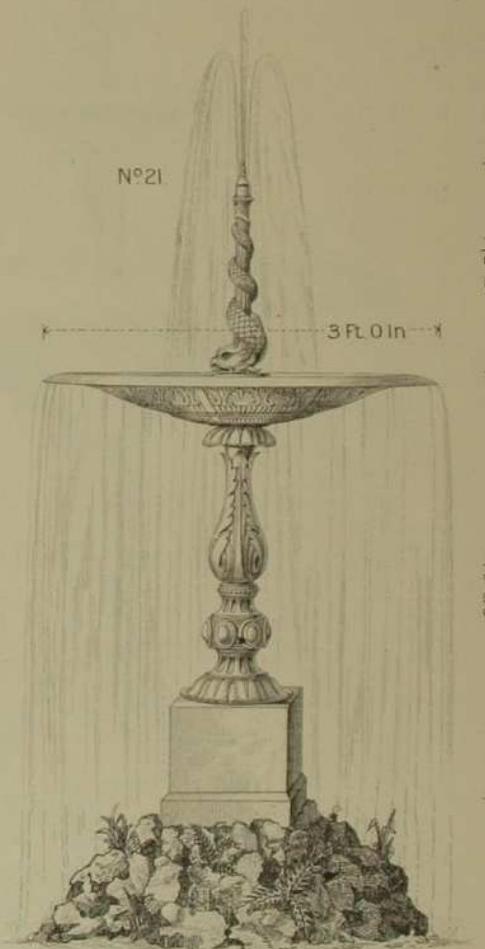
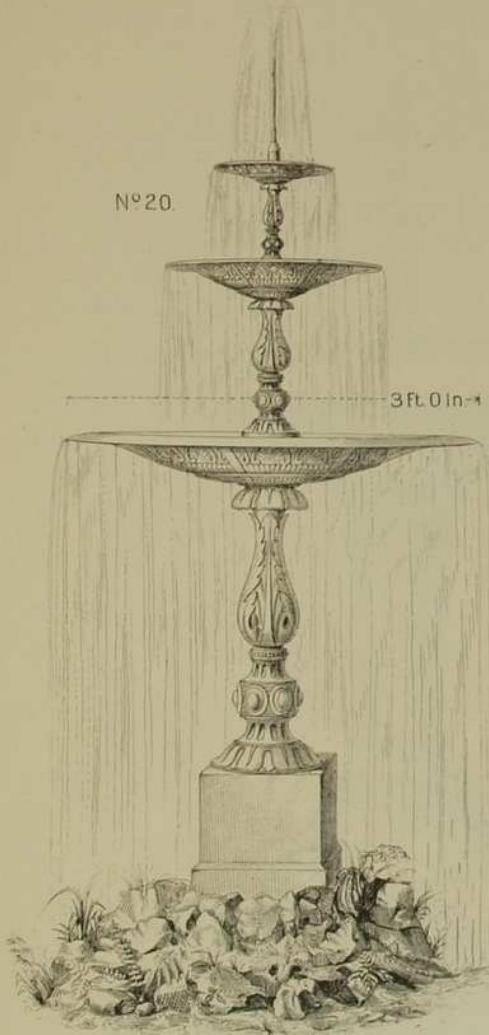
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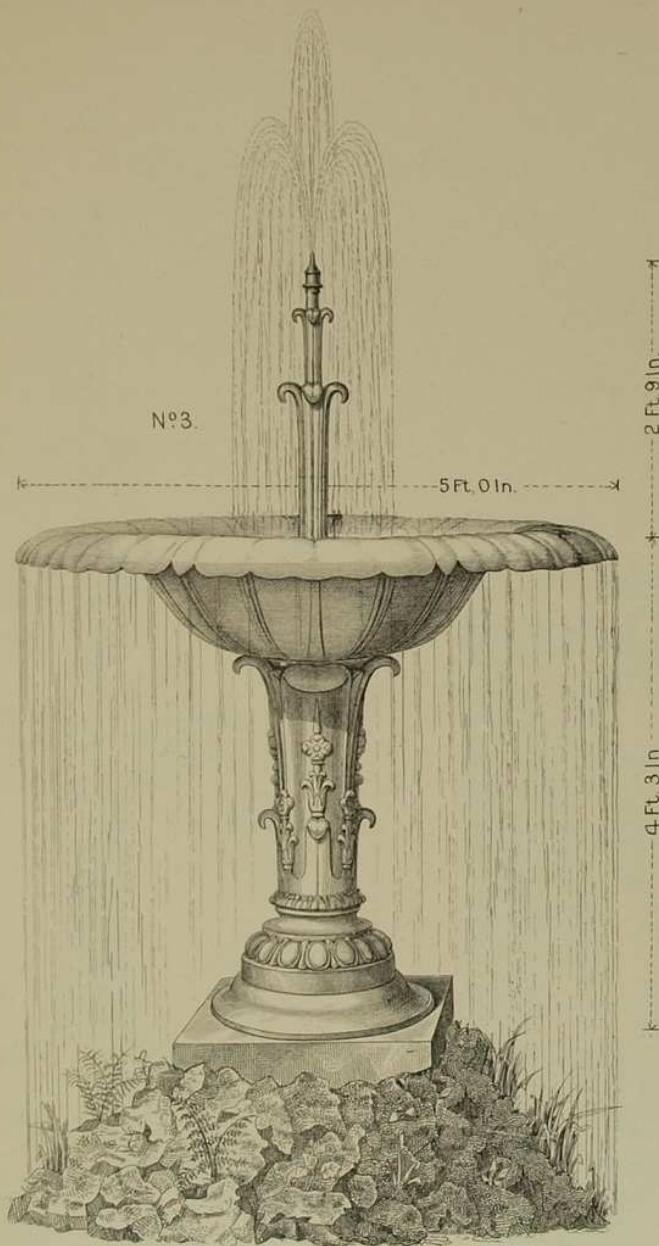
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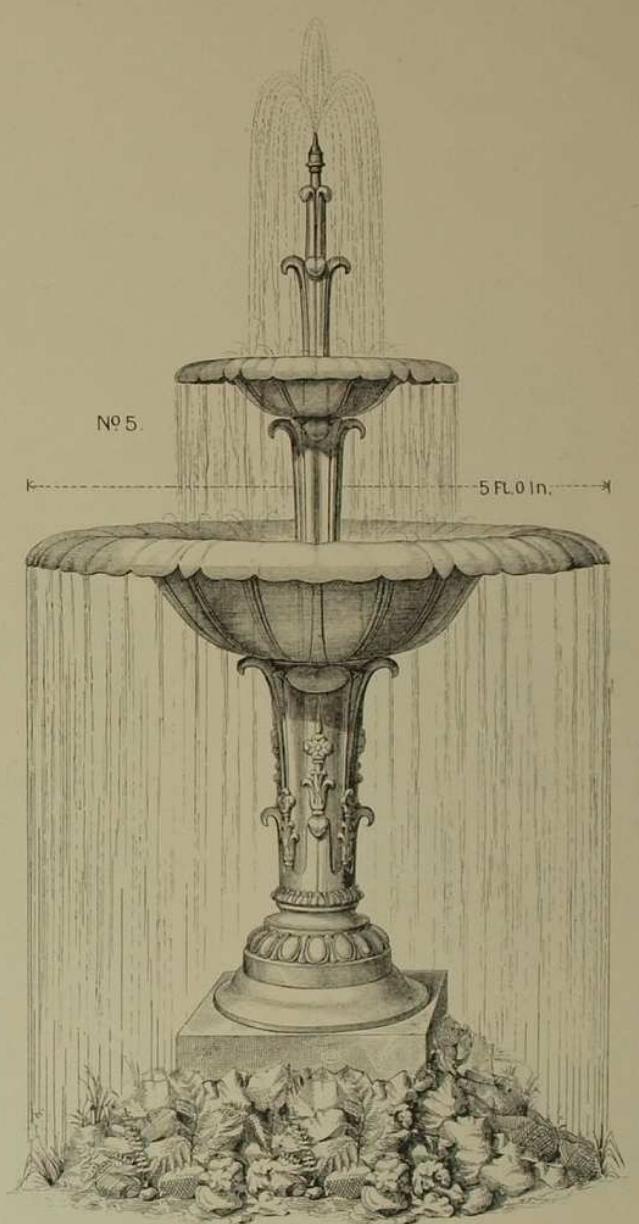


No. 3.

2 Ft. 9 In.

5 Ft. 0 In.

4 Ft. 3 In.



No. 5.

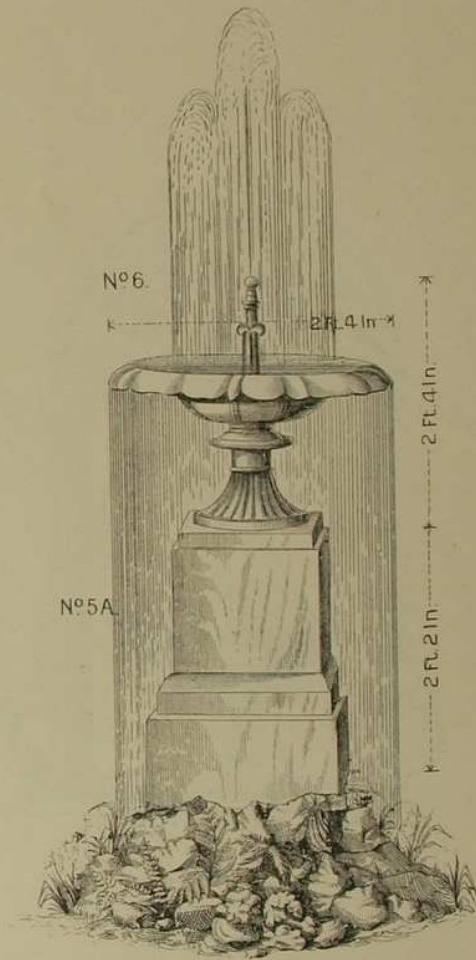
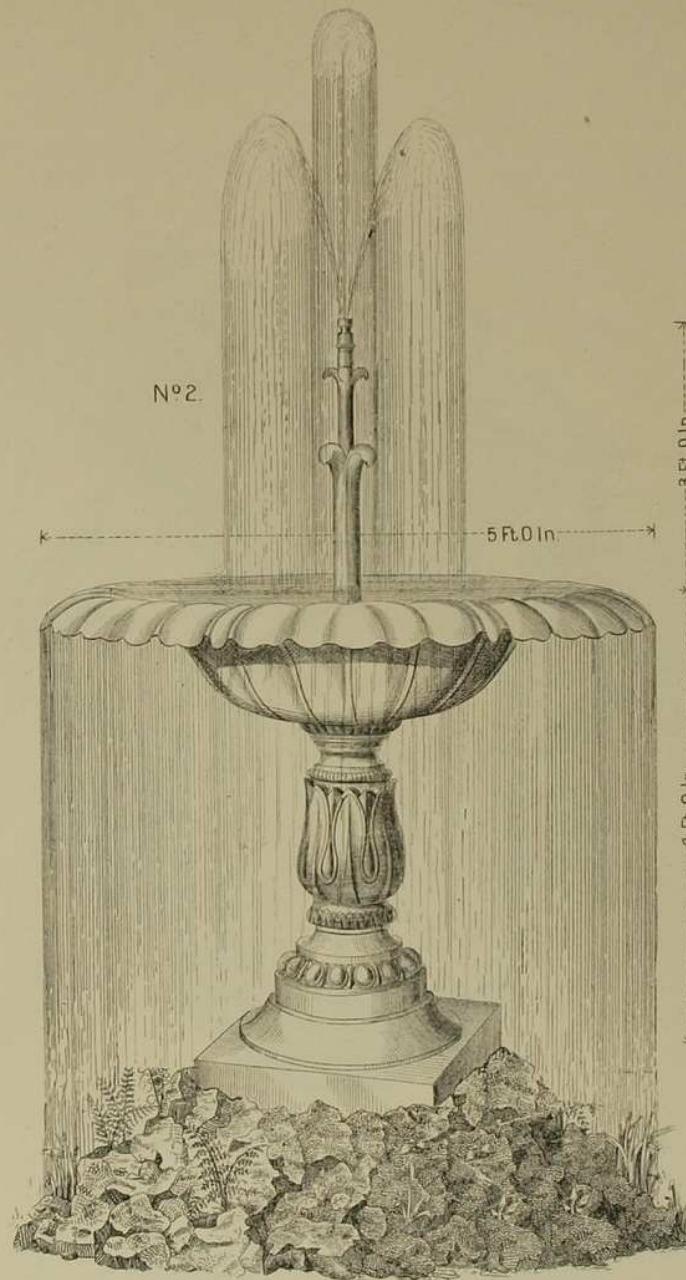
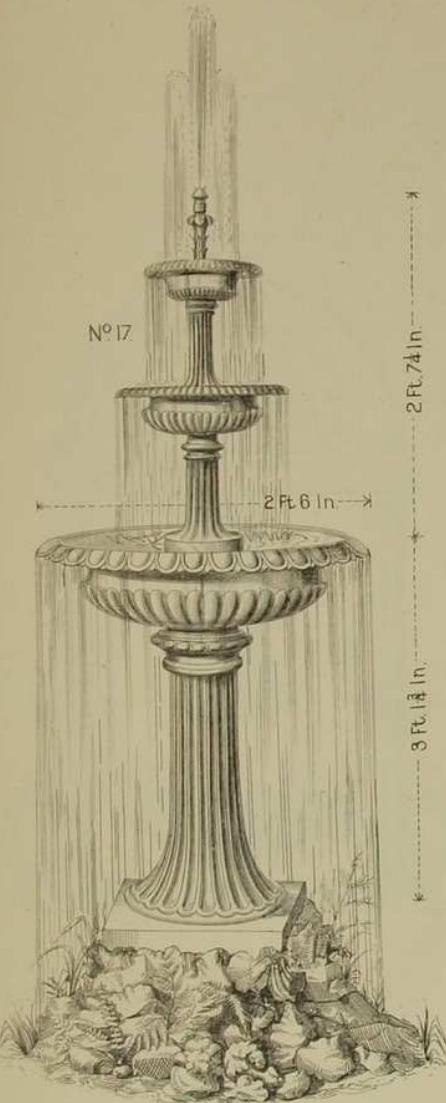
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4 Ft. 0 In.

4 Ft. 0 In.

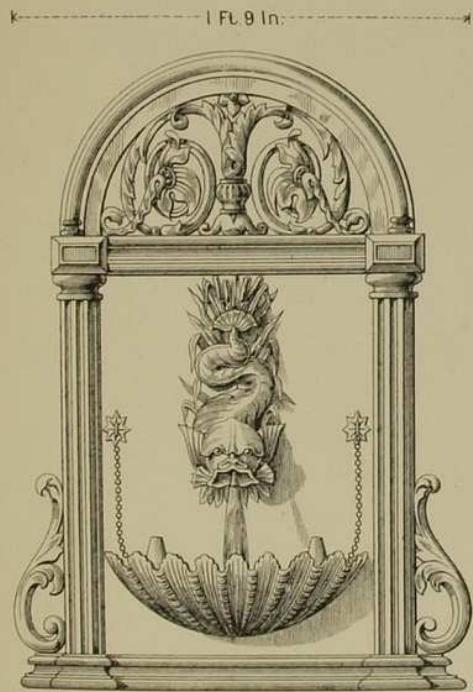
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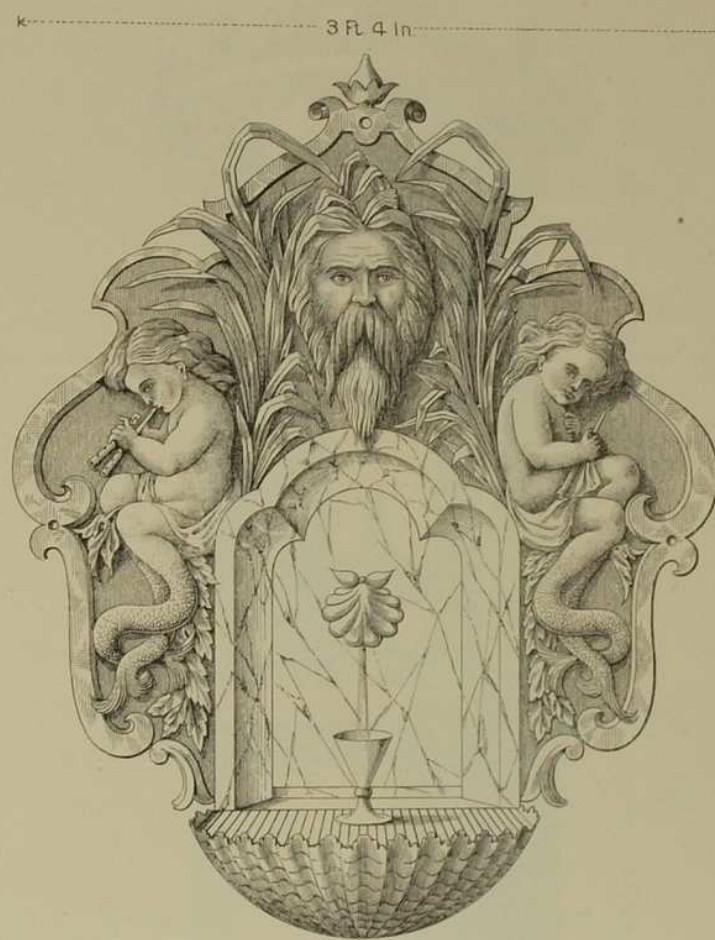


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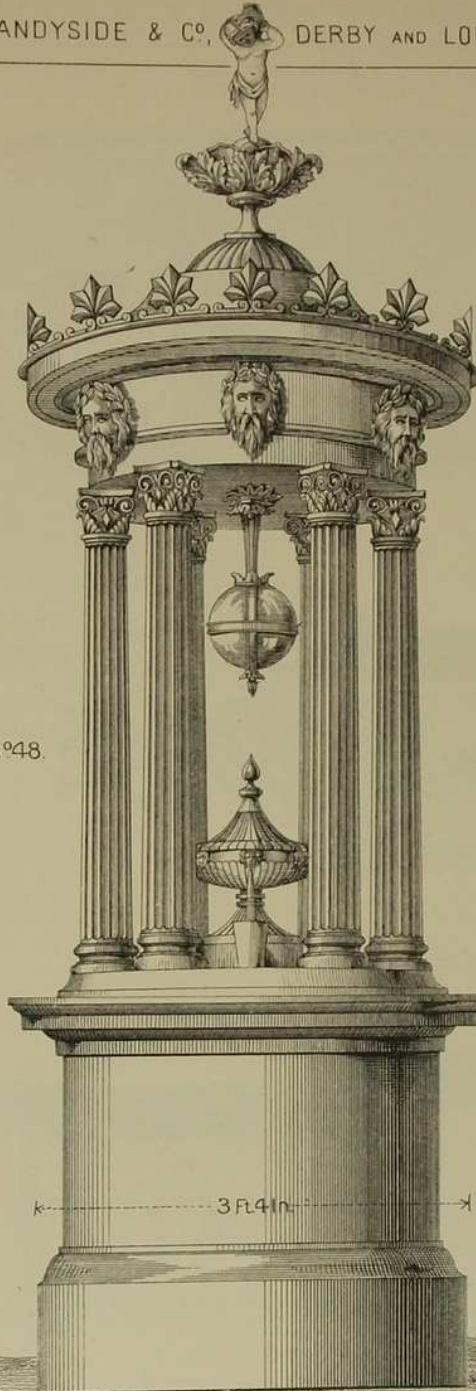


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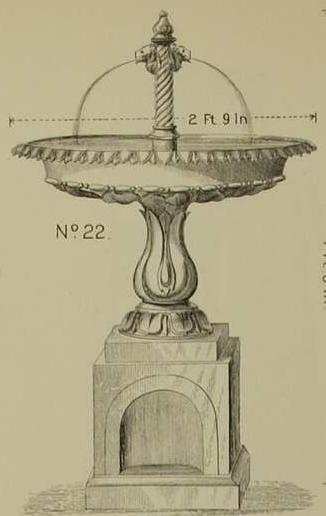
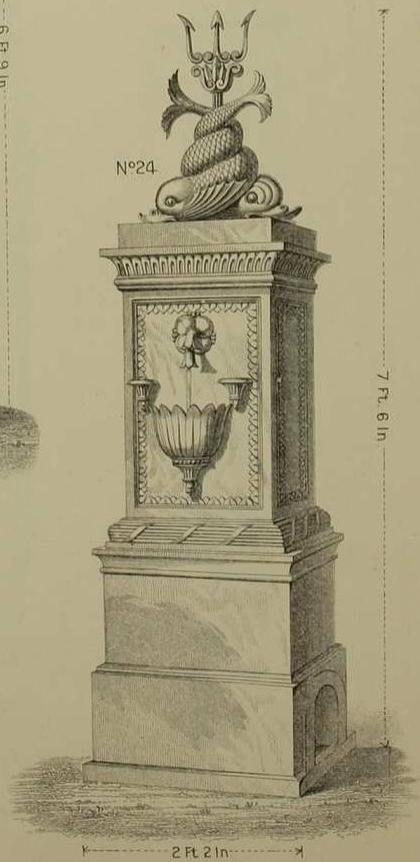
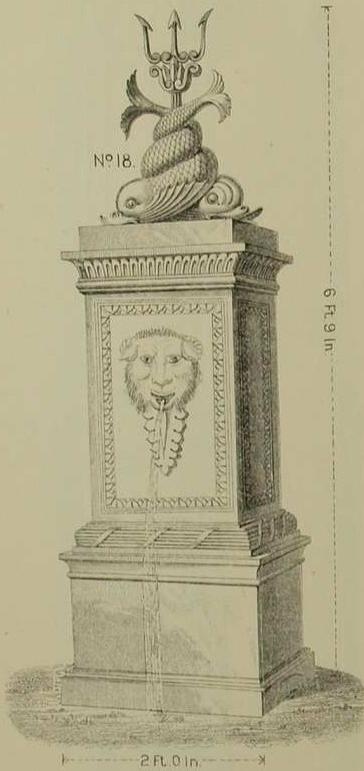


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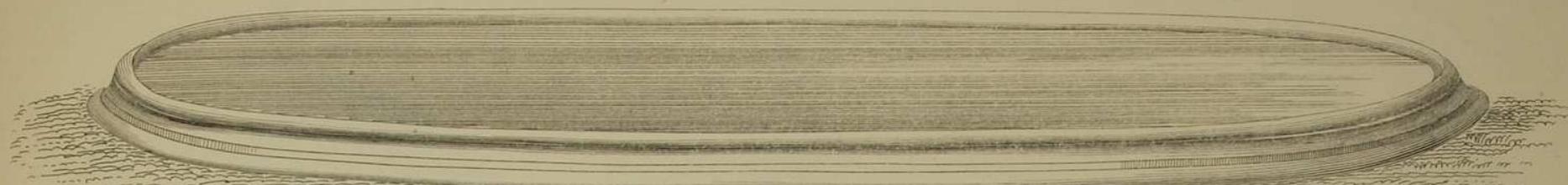


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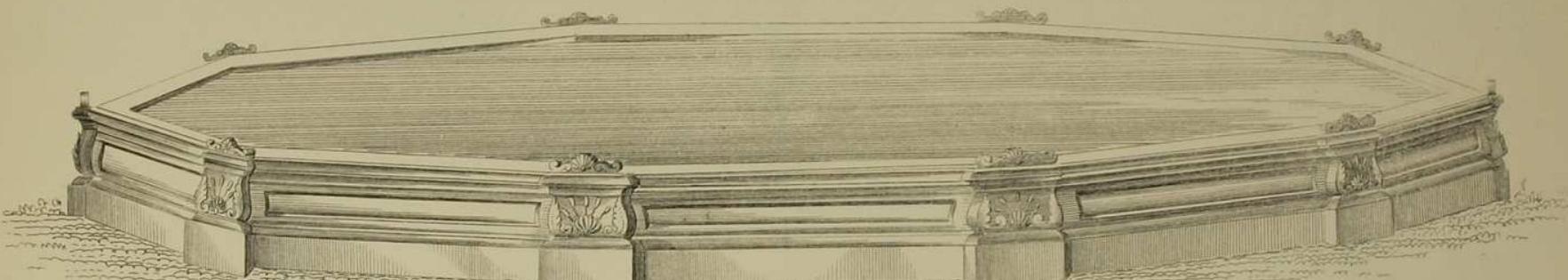


These Fountains supplied with Spring Stop Cocks to order.

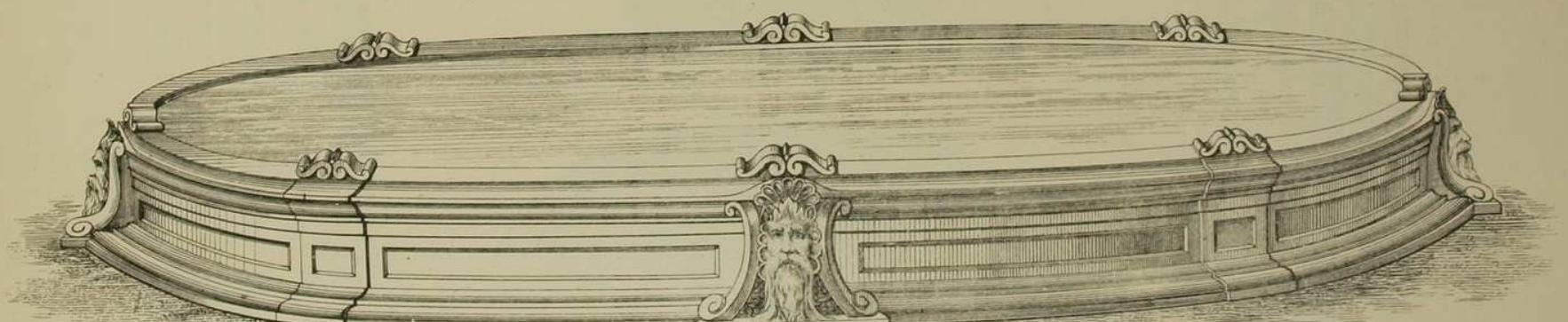
For price see Appendix.



No. 3.

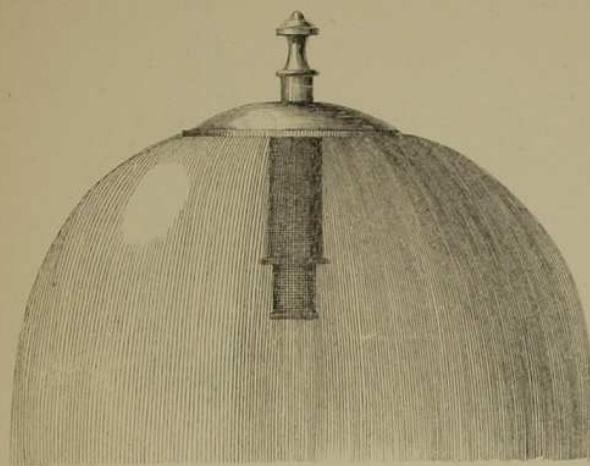


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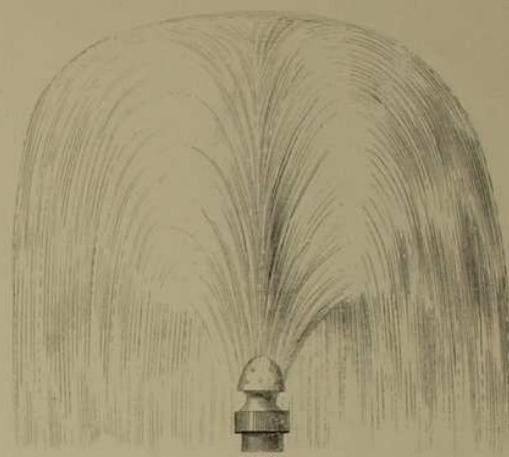
For prices see Appendix



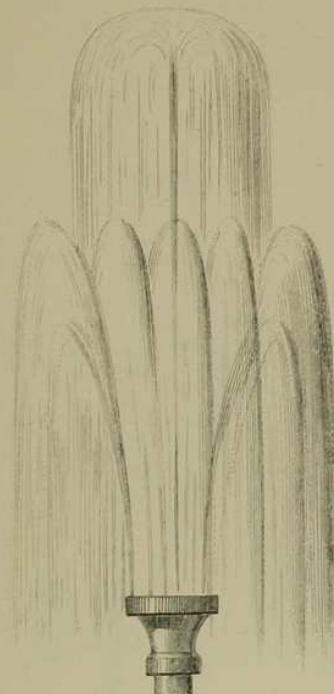
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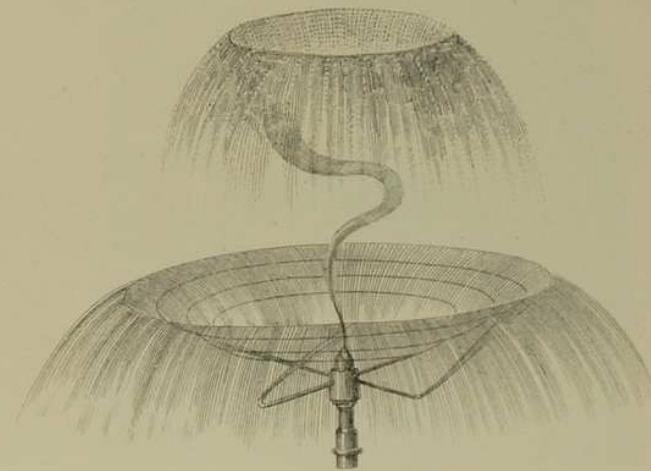
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No. 3.



No. 4.



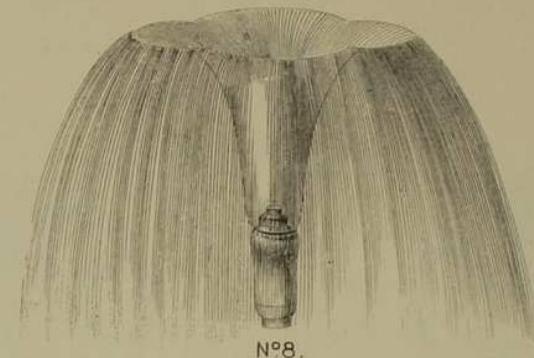
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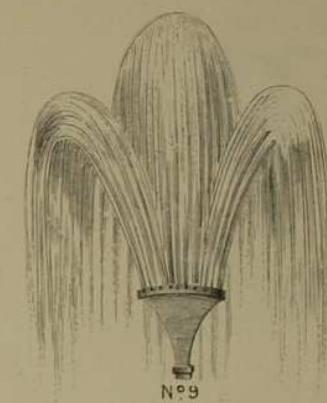
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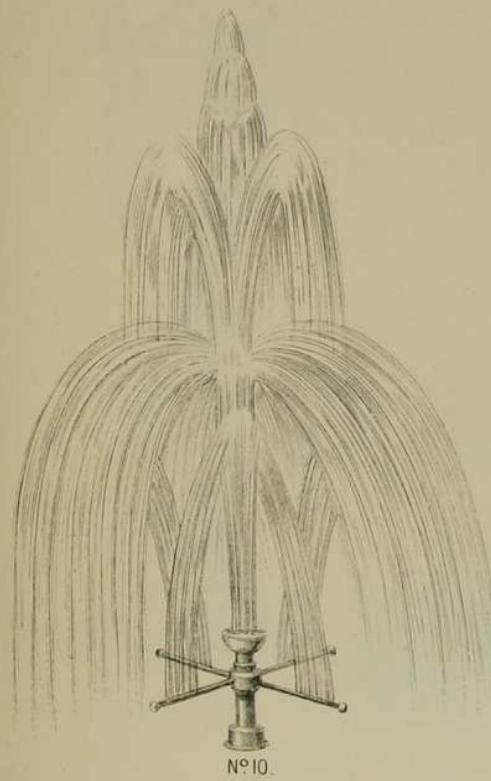
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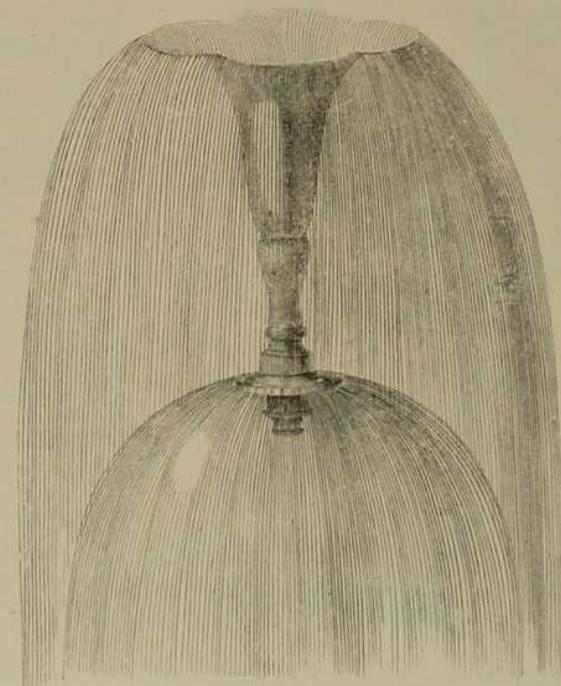
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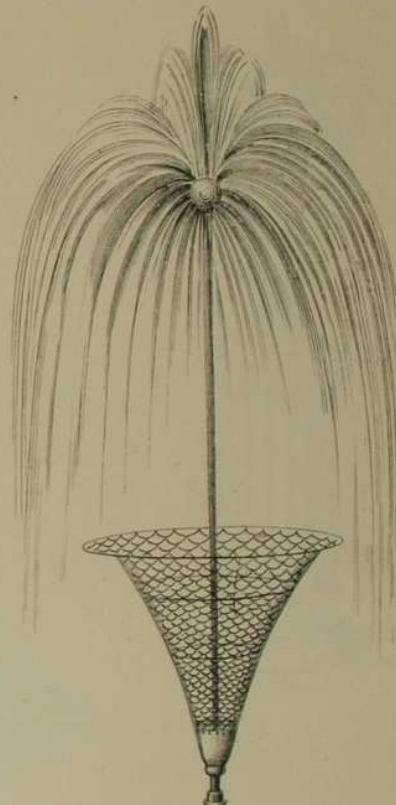
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No. 10.



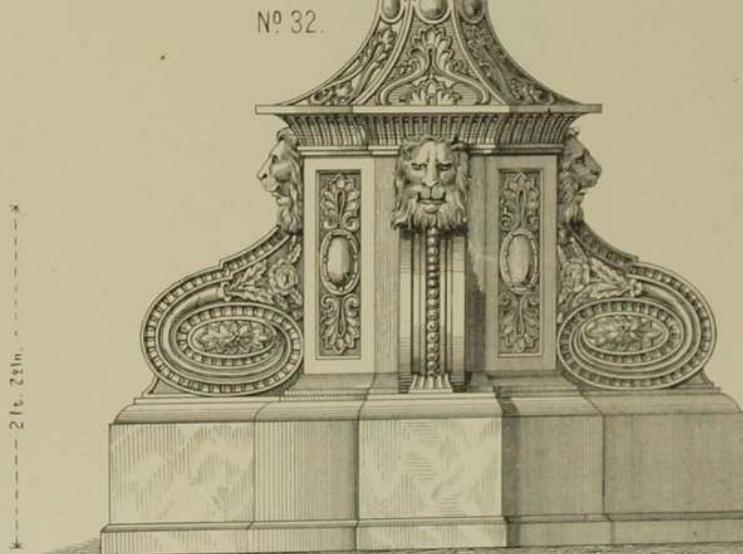
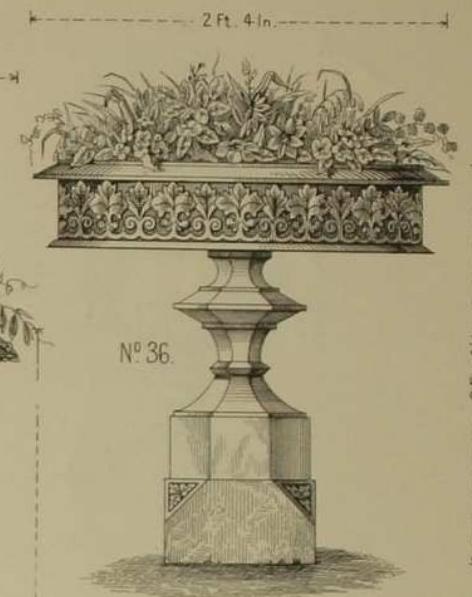
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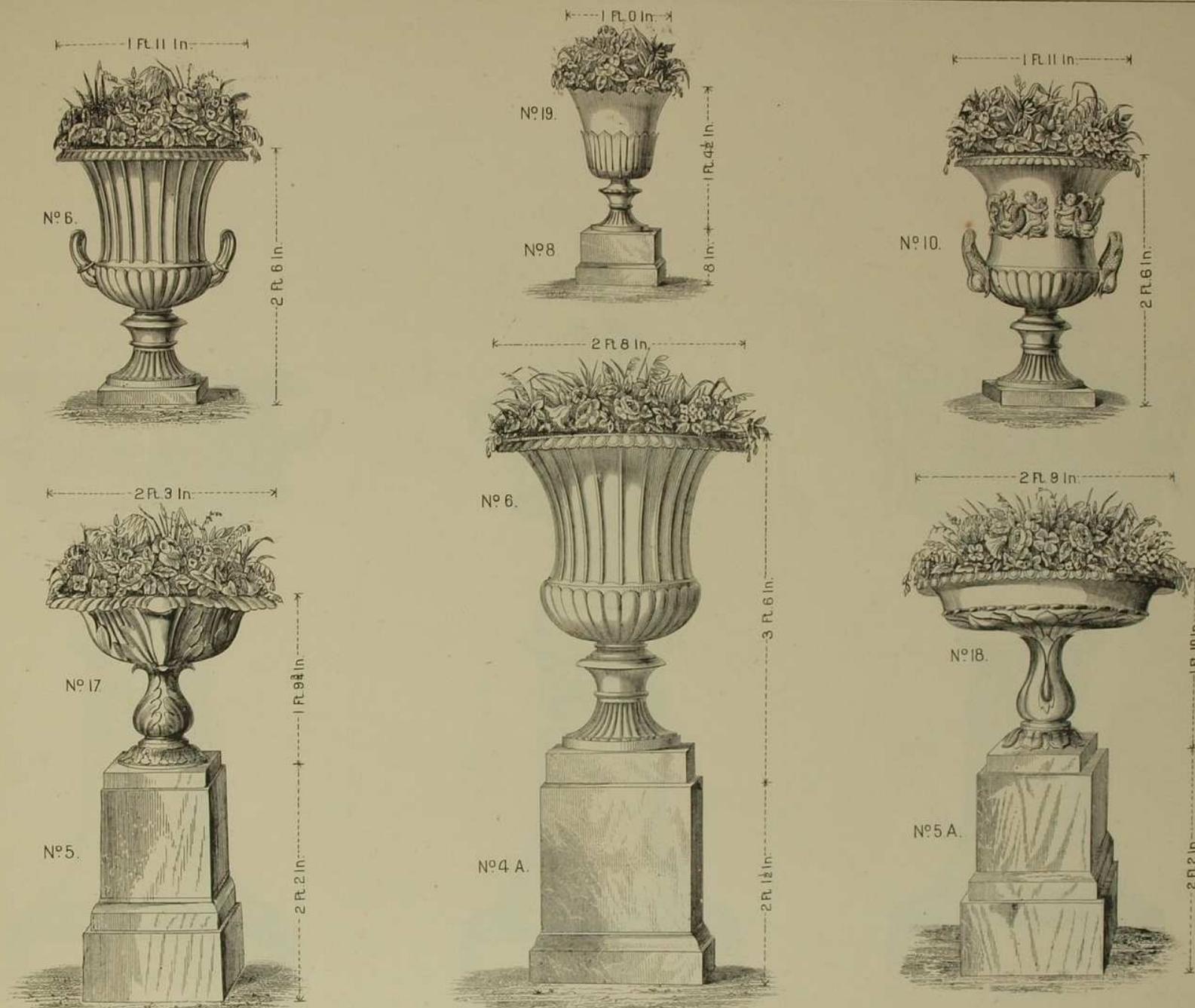


No. 12.



For price see Appendix.





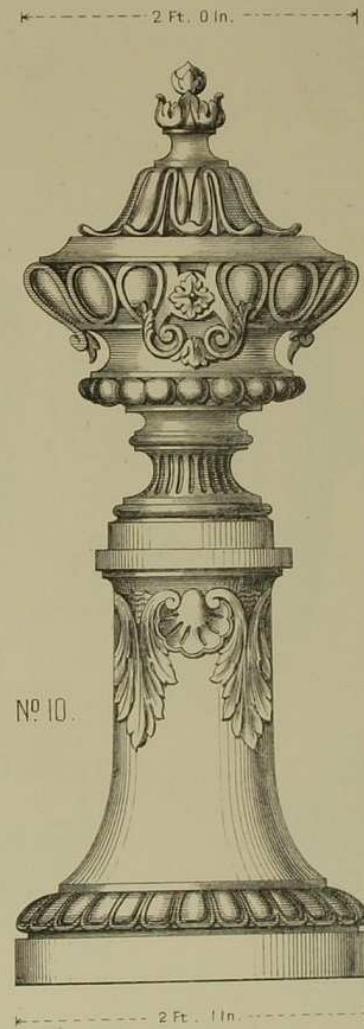
For price see Appendix.

Nº 37.



Nº 10.

Nº 38.



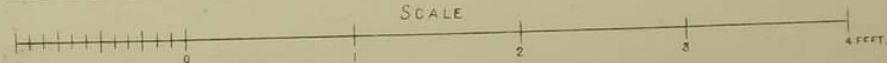
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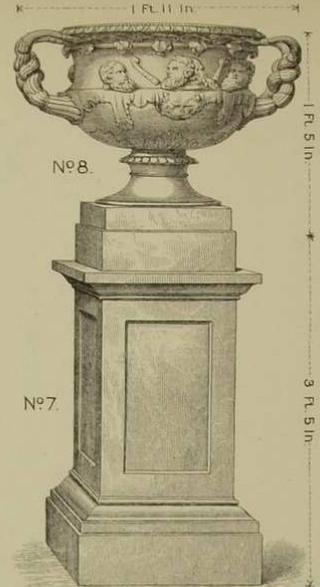
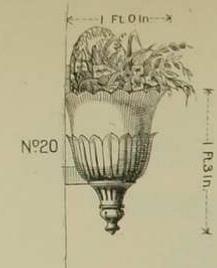
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Nº 10.

For prices see Appendix.





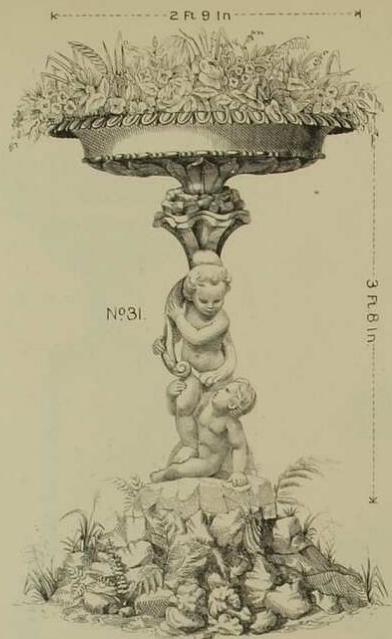
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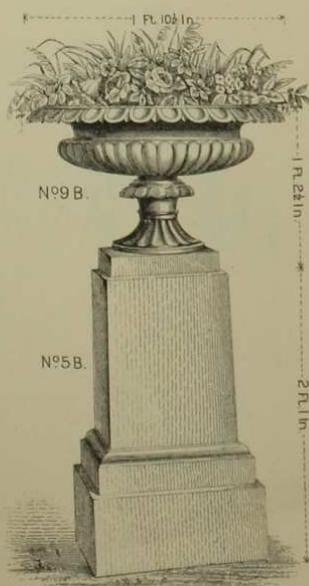
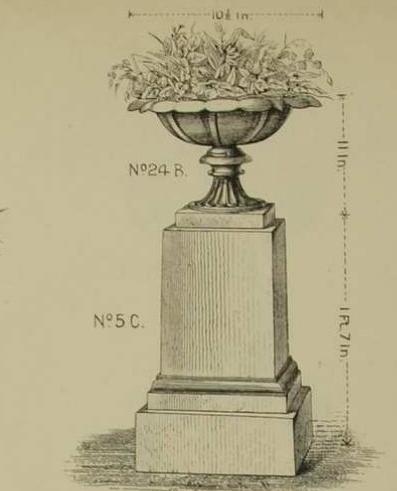
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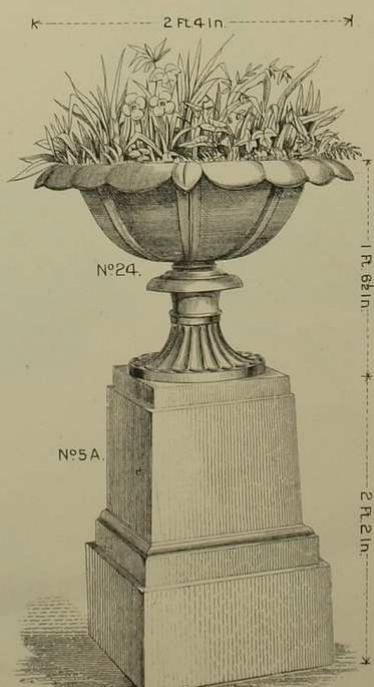
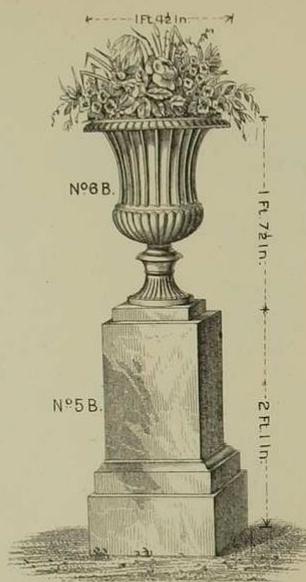
No. 16.



No. 5 A.







For price see Appendix.

